



EDUCATIONAL SUPPLEMENT
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DES-bashing is in full swing. The OECD report last year began the sport with a swift upper-cut; Lord Crowthorpe-Hunt, a recent DES Minister, has been pummelling away; a charge that the Department covered up vital projections of teacher training places needed has put the victim on the floor. And the Commons expenditure subcommittee, in their forthcoming report, are likely to put the boot in.

A few weeks ago suspicions of shabby practice and "divisive and racist" strategies were aroused in the trusted world of teacher education by the forwarding of letters to college principals warning their 1977 admission figures. When the figures, college by college, were examined, it was found that had been informed of the quota system and their own quota of places in relation to those of other colleges, this time each college was strongly, and kept in the dark about the unfounded suggestion that additional cuts were being made surreptitiously, and awkward quackery by Mr. Miley and Mr. Hamilton when they attended the CLEA conference last month.

Mr Mulley has enough troubles without this.

There is, of course, no serious suggestion that the new figures really mean that colleges have got to fall on their students or any fixed percentage of students. Even if, as some imaginative NUT spokesmen have suggested, the DES had dreamed up the idea of an increased failure rate as an "asbestos" method of wishing away some teacher unemployment, it must have been obvious that every college principal worth his salt would reject that sort of pressure.

conference last month. The Department has again descended on Elizabeth House in the wake of the result of another circular letter to the colleges, giving each a figure for the number of qualified teachers expected to emigrate during the training period of three or four years, which assumes a wastage rate of ten per cent, an increase on the earlier figure of eight per cent. Crashing inaptitude on the part of the Department has again been greeted with baleful suspicion by the colleges. It might have been thought that the increased awareness of sensitivity and intuition would have told the desk-bound administrators an "outward" was necessary to introduce an "outward" of a more kindly, his first task was to convince the colleges and the Teachers' unions that it was not an injunction to fall a fifth of the number of the latest misunderstanding is wholly predictable and completely avoidable.

Every attempt by the central government to keep down local authority spending brings nearer the collapse of the present system of central government finance and polarisation between central and local initiatives which the Layfield report posed. As has been said, too, that all the movement is towards a stronger central control: the Layfield "localist" solution looks more and more unlikely ever to fit into a total pattern of national budgetary planning.

Mr Peter Shore's latest blast cuts £50m from the Rate Support Grant in 1975-76, and insists that any overspending next year will be knocked off next year's grant. He is left with the "ipjustice" implied by confining local government to a single global sum, while the various authorities dutifully scrimp and save while others overspend by millions.

The "good" Tory counties want

their thrifty virtues recognized and the big-spending Labour boroughs to be penalized. But the Revenue Support Grant is meant to give authorities freedom: within a global estimate, increase of—say—nine per cent, it is presently assumed that some will need only a 11 per cent more, while some can get on with seven per cent. Local needs differ: it is by no means to be expected that all overspending is due to extravagance. But the Environment Ministry were to be diligent every day, to find out the cause of every deviation from the middle course and award praise and blame, it would defeat the system. All important decisions would have to be taken on a budgetary, individual authority basis, and not centrally approved. But 1976 is not going to be the last year when public spending has to be held down, and each time the screw emphasizes the ramshackle nature of the present arrangements.

Sir,—The problems of those who are trying to harmonise the teacher-training policies of local authorities, the Department of Education and those universities which validate their education certificates and degrees are exacerbated by the recent decision of Coventry City Council opposing the merger of its college with the University of Warwick, and the Lanchester Polytechnic.

This despite approval in principle for such a merger being given by the Government in 1975 when he noted the "close and exceptional working partnership" which the two institutions have established since the university was established on the grounds that of that college "and hence difficult to sustain if the college were to merge with the Lanchester Polytechnic."

The Coventry City Council has now, by a narrow majority, decided to reverse this policy, apparently in order to maintain control of teacher training. If this is adopted, the college will merge with the polytechnic against the wishes of stu-

dents, staff and governors. The teacher training courses built up jointly with the university over a 10-year period will be dismantled and recast, the close involvement of the university in initial teacher training will come to an end, the integration of teacher training with other degree work will be made more difficult, and plans for the more efficient use of resources between university and college would have to be abandoned.

Those of us who are closely involved in this unique example of cooperation across the binary line are convinced that the educational merits are too important to be given up lightly. We are supported, particularly by the local teachers' organizations and the majority of informed public opinion in Coventry, Solihull and Warwickshire, in our view that a merged college and university can together provide the best possible basis for the future of teacher training in this area.

A. R. ROSE,
Teacher member of the merger con-

sultative committees. Secretary,
Coventry NUT.
F. D. YOUNG,
Secretary, Consultative joint com-
mittee teachers' panel, Coventry.
E. CHANDLEY
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RED SCREEN,
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D. JONES,
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lege of Education.
A. E. STABLES,
Head of professional studies, Coventry
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R. R. SKEMP,
Professor of education, Warwick
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P. LEONARD,
Professor of applied social studies,
Warwick University.
R. WHITTENBURY,
Professor of biological sciences,
Warwick University.
D. P. KALLY,
Professor of environmental sciences,
Warwick University.

Sir,—Roger Webster, in his letter about the quality of teacher training (July 23), is right in his diagnosis of what has gone wrong and why. But I believe he suggests the wrong remedy.

He points out that the growth of the colleges in the 1960s and the consequent changes of structure and of staffing led to a break with classroom reality. I am sure he is right. I am sure he is right, too, in his analysis of what can and cannot be done.

Most of the student teachers who come to us for teaching practice have had little if any specific instruction in basic classroom techniques. They know a good deal about theories of learning. They can quote Piaget and Bruner and Skinner and Bernstein. But they do not know how to write on the blackboard.

They cannot operate "most"

they can, they do not know how to select which is the most appropriate. They may even not be aware that such selection is necessary or possible. They have not been taught how to prepare a lesson or plan a scheme of work, how to interpret objectives or discern the standards required, given a syllabus and a set of past examination papers. They do not know how to talk to students, let alone help them to learn.

What is needed is not more "education", as Roger Webster seems to be suggesting, but a little straight-forward pedagogy. The relationship between education and pedagogy is analogous to that between science and technology. We cannot have technology without science, but science can exist on its own without technology, just as education can without pedagogy. Unfortunately, without the latter, the former is of no practical use.

JOHN TEMPLE,
North Oxfordshire Technical
College and School of Art.

Twice as many

But the figure does not give true picture of unemployment because many teachers are not included in the Department of Employment's professional register. Married women who have just qualified claim unemployment benefit. And the register is not the traditional refuge of teachers seeking jobs.

The National Association of Teachers in Further and Higher Education forecasts 20,000 unemployed when term starts.

Survey of 20 shirts next month. A

by Stephen Cohen

The Department of Education denied this week that it had ordered teacher training colleges to full one in five of next year's intake of students. It was "absolute nonsense," said a spokesman.

But the Department did not retract last month's letter to colleges which set out the target intake and output figures. These gave the first hint that more students would not be expected to pass.

The National Union of Teachers has asked the department to withdraw it. Mr Mike Power, a union official, said the letter had been circulated without any consultation or discussion about the figures. It should be withdrawn "in view of the consternation and confusion that has been caused".

The letter, from the higher and further education branch of the DES told local authorities and colleges how many students to admit in September next year and how many they could expect to qualify three or four years later.

In nearly every case the output target was exactly 20 per cent less than the input figure. College principals and chief education officers in the provinces were more in tune with the government's policy of rationing. A subsequent report explained that wastage rates had been increasing since 1964, when 14.1 per cent of students failed or dropped out of their courses. In 1970, 17 per cent of the 1970 intake did not qualify for university, and the wastage rate in 1971 was 18 per cent. Provisional figures for 1972 indicate an 18.5 per cent rate. The Department said a 20 per cent wastage rate in the 1977 intake, the target for 1977, would explain why it was necessary to set a target for 1977 of 100 per cent of the colleges were going to experience a high wastage rate anyway. He said, however, that colleges would be running Diploma of Higher Education courses would be allowed to exceed their quotas if they wished.

Calton College, the 125-year-old teacher training institution near Oxford, is to close in three years' time.

Mr Fred Mulley, the Education Secretary, ended the confusion and delay over the college's future in a letter to the governors this week. This said that they would only be allowed to admit students next month—and never again.

The future of another Church of England college, All Saints, Tottenham, is also in doubt.

Mr. Mulley has allowed them an intake this year and next September, but a final decision has yet to be made.

On Cullman the Education Secretary has not moved from the view he took in February that the cause of teacher training would best be served if it closed.

In his letter he told the governors that future requirements for a teaching force serving a largely urban and developing multi-racial society would not best be met by education of a manotechnic within a rural environment in an area already well provided with other institutions of teacher and more general higher education. It is likely, he said, that a "significant reduction" will be neces-

Twice as many

The number of unemployed teachers more than doubled last month to 383 compared with 2,593 in July of last year.

But the figure does not give a true picture of unemployment because many teachers are not included in the Department of Employment's figures.

The National Association of Teachers in Further and Higher Education forecasts 20,000 unemployed teachers start next month. A survey of one third of teacher training colleges predicts that 13,000 newly qualified teachers will be out of work while 7,000 more will be

In a letter to Mr. Mulley, Professor Isaac Chisholm, chairman of the group of professors, said that they were increasingly worried about poor standards in schools. The new exam proposal would cause a further fall. Longer degree courses might be necessary but were unlikely to compensate for students' lack of competence in basic subjects as well as their attitudes.

A growing body of expert opinion considers that educational policy and practice in Britain must in future give much higher priority to providing individuals with competence in basic subjects, skills and attitudes required for work in the professions, industry and commerce."

The effect of the Schools Council's proposals for new exams at 16-plus on the quality of scientists, scientists and accountants would be grave. Professor Chisholm also criticized the Schools Council for having so few representatives from industry.

Fifteen Berkshire parents who appealed to the Department of Education and Science over the county's refusal to give their sons the places they won at Windsor Grammar School used to take counsel's advice on the legality of the education committee's action.

Mrs Beryl Daniel, on behalf of the parents, said: "This is not an unil-comprehensive campaign."

They had been told there were no places at the school, but when it became known that there were enough classrooms and teachers for 30 more pupils, they were told that entry had to be limited this year because of increased numbers planned for

to the education committee for an independent body to supervise the selection. He said he had been inundated by letters from worried parents of 11-year-olds. He proposed that the Schools Council or the National Foundation for Educational Research act as investigators.

"I am not putting this suggestion forward on narrow party grounds but in the sincere hope that we can minimise this difficult problem of selection within the very short time

The council has not accepted the suggestion and the second stage of the process, a panel of four teachers to consider appeals against the selection, is going ahead the week after next. Letters to parents telling them whether or not their children have been chosen will go out next Wednesday.

Meanwhile the council is tidying up other loose ends in preparation for next term. Council leaders have been meeting to discuss the appointment of teachers to the few remaining unfilled posts, and sign-writers will shortly be putting up new names outside the schools that were to become sixth form colleges.

Mr Thorpe said that one or two teachers might have to go to different schools. The fact that some schools are reverting to grammar status had created a few vacancies

In the longer term the council is beginning to make plans for selection next year and is considering the flexible transfer system which will allow wrongly placed children

● In Buckinghamshire, Mr John Campbell, chairman of the education committee, this week appealed to Mr Mulley, Education Secretary, to expand five grammar schools. Last summer the authority was given permission to expand three secondary moderns, but its application to provide extra places at two grammar schools was rejected. In April Mr Mulley turned down an application to extend another three grammar schools.

Children in Wales are far more likely to leave school without an examination pass than children in the South East, according to previous figures issued this week by the Department of Education and Science.

They show that the large increase in school leavers with examination passes following the raising of the school leaving age has been sustained. But there are still wide regional variations.

In 1974-75, 30 per cent of Welsh children left school without a GCE or CSE grade 5 or better, compared with only 14 per cent in the South East, excluding London.

East Angles, which has a poor record of pupils going on to higher education, also comes out well with only 18 per cent leaving school unqualified, in most other regions the proportion is about 20 or 21 per cent.

These figures also show that the rapid rise in the number of girls passing two or more levels has slackened off. This

should ease universities' fears of a big increase in applications over the next few years.

Since the early seventies the number of boys passing two or more A levels and going on to higher education has been stagnant. But the number of girls doing so continues to rise. Now it looks as if the girls have run out of steam.

The latest figures, for 1975, show that for the second year running the number of girls passing two or more A levels rose only slightly between 1974 and 1975 — from 36,000 to 36,600 — 37,100. At the same time the number of boys went up from 46,300 to 47,200.

The number of 18-year-olds in the population is due to nearly doubling steadily and over early 1980s universities will have to cope with scarce resources they would not be able to take all applicants. But A level results suggest that fewer will be eligible for places than was expected.

Manitoba school caretakers agreed this week to call off industrial action pending further negotiations with their employers.

Towards the end of term up to 200 schools in the province were closed by one-day strikes when caretakers also locked the school gates. They were protesting against cuts of £78,000 in the caretaking and cleaning wages.

Mr Paul Dunn, area officer of the National Union of Public Employees, said the local education authority had made the cuts on July 26, but at a meeting with NUP representatives on Tuesday it agreed to reductions in staff which provided the caretakers were back to work pending further talks.

Industrial action was possible during the holidays because it was then that contractors usually moved in to carry out maintenance work. They depended on the cooperation of the caretakers.

"The county's plan to cut down on wages meant breaking the agreement they had made. Our understanding was that they could change the bonus scheme without our agreement. It would have meant a loss of £250 a week for some of our members."

In a letter to the TES (August 6) eight teachers at Macleod Junior school, Ilkley, West Yorkshire, said they were concerned that the caretakers might go beyond withdrawing their labour and refuse to admit staff and pupils.

They called for an assertion that it was a school's right to insist that a caretaker did so only on instructions—allbeit implied.

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Mulley urged to get a grip on curriculum and standards

The Education Secretary should get a grip on content and standards in education, Mr Timothy Raison, a former Conservative junior minister, says in a book published this week.

He wants the minister to do this by laying down minimum standards of literacy and numeracy and by testing all children at eight, 11 and 14. The Central Advisory Council for Education should be resurrected to advise the minister on how to play a more active part in shaping the curriculum as Lord Butler, architect of the 1944 Education Act, intended.

"A lead is needed at the centre to strengthen the morale and purpose of this fine but somewhat battered vessel," he argues. "If it is considered desirable and practicable to lay down minimum standards of physical provision in schools or of physique and health in children, why do we shun the possibility of laying down minimum standards of literacy and numeracy?"

The minister needed more effective advice than he got: "In the realm of social policy generally, believe the most pressing need is more often for serious and responsible discussion and less often for academic research, than conventional wisdom has recently allowed."

But facts were needed too, and the most urgent task for the advisory council would be to consider setting up a national system for testing children's performance.

by Bob Doe

"The purpose of this would not be to provide a selection procedure nor, I hope, would it be used to establish or reinforce a pecking order among schools or among children. The aim is emphatically not to provide 'marks' for publication."

The object was to provide information about children's progress, the help they needed, class and school performance and statistics on national standards.

"If we are to continue with a largely decentralised system, public and political opinion may increasingly demand a closer check on what is going on and it is by no means certain that the type of simple monitoring advocated by Bullock will be enough to allay fears."

He was not arguing for a national curriculum, but for the Secretary of State to have more influence. A reshaped Schools Council would translate general principles into specific advice.

The book, published by the Centre for Studies in Social Policy, contains Mr Raison's thoughts on 17 seminars on educational administration held by the centre in 1974 and 1975. He argues for increased standards for teachers and the formation of a teachers' council with the powers and responsibilities of other learned professions, representation on governing bodies and a reform of the Burnham system.

"It makes no sense to negotiate pay separately from conditions of service," he says. "For example, there is no scope to trade off a generous pay settlement against a longer year for teachers."

In some ways teachers had great privileges. Unlike any other local authority servants, they were directly represented on education committees. "Nevertheless, in the world where education policy is formed and administered their say is less than that of soldiers in the Ministry of Defence or doctors in the health service. Even the Incorporated Teachers' Union has lost some of its standing."

Increased professionalism among teachers was more important even than the greater involvement of parents in education.

In the pre-school field, Mr Raison says there should be a national advisory council for the under-fives set up by law, by the DES and the Department of Health and Social Security.

The object would be to stimulate official cooperation between departments at national and local level. It should include representatives of voluntary bodies, like the Pre-school Playgroups Association, and of parents' organisations. The need was for a more independent body which could give a strong and open lead. The Act and the partnership; an essay on educational administration in England by Timothy Raison, Research Publications Services, Victoria Hall, East Greenwich, London SE10 0RP price £2.50.



Harking back: One of the Kincorth Waits Early Music Group, Aberdeen, who won a major award at Croydon.

Picked for the proms

Nineteen groups have been selected to take part in the two Schools Proms at the Albert Hall in November. The concerts are sponsored by The Times Educational Supplement.

Selection, made on performances at the three-day National Festival of Music for Youth in Croydon last month, had been extremely difficult. The Schools Prom organiser, this week, The standard of the school groups had been very high.

The groups selected for the two concerts are:

Monday, November 29: William Rhodes Secondary School brass band; Itchen Sixth Form College contemporary music group; wood steel band; Bedales wind quintet; Woking County Grammar School for Girls string orchestra; Doncaster Schools' jazz orchestra; Darlington Youth Big Band; Cully Music Centre percussion ensemble; Mid-Herts chamber orchestra; Dunstons School orchestra; Tuesday, November 30: Bep Celynnu Comprehensive School youth band; Ambleside First School percussion group; Plafico School string orchestra; Redlands County Primary School recorder ensemble; Primrose School dance band; Croydon Schools' Centre for five Players first orchestra; Hampshire County Youth Orchestra wind ensemble; Kincorth Waits early music group; Stoneleigh Youth Orchestra.

Applications for tickets should be made as soon as possible direct to the Albert Hall.

School leavers bear brunt of cut in Civil Service jobs

School leavers looking for jobs will be harder hit than existing staff by the latest £95m round of Civil Service cuts, said Mr Bernard Holloway, secretary of the Careers and Appointments Board at Manchester University, this week.

The bulk of recruitment was still leavers (4,000 in 1975 compared with 1,800 graduates) and the burden tended to fall on them. But recruitment overall was being cut back and the situation was likely to worsen.

A spokesman for the Civil Service Department said this week that an announcement of £45m was still to be made, but that would mean a reduction of about 4,500 jobs in the number planned for 1978/79 and would bring the total staff to 740,000-745,000 compared with its present 748,000.

It was too early to say how this would affect recruitment of graduates. Each department had yet to work out how best it could cut its spending.

The Department of Education and Science, whose cut is £12m, estimates that some 250 jobs planned for 1978/79 will be lost. The Department of Inland Revenue (£13.4m) and the Department of Employment (£8.1m).

This year, according to a spokesman from the Department of the Environment, recruitment of scientists and engineers had been minimal. Of the direct entry executive officers normally recruited by the department, some 30 per cent had been usually graduates, but there had been practically no recruitment of that group this year.

The department was still working out how the 1978/79 cuts would be distributed, but indications were that recruitment would be adversely affected.

The Department of Education and Science, whose cut is £12m, estimates that some 250 jobs planned for 1978/79 will be lost. The Department of Inland Revenue (£13.4m) and the Department of Employment (£8.1m).

SRC will back part-time postgraduates

Part-time postgraduate students would be supported by The Science Research Council if there was any review of the matter if there were convincing reasons why the responsibility of local education authorities who may make discretionary awards.

The Bulletin says: "The Council would be willing to ask the Department of Education and Science to review the matter if there were convincing reasons why the responsibility of local education authorities who may make discretionary awards."

£50m cut takes shine off the furniture

School furniture will become shabbier before being replaced and even fewer teachers may be recruited as a result of further cuts in public spending announced by the Environment Secretary last week.

Mr Peter Shore told the Commons two days before the break for the summer recess that he was asking local authorities to save another £50m in capital expenditure this year.

He would also knock £50m off the 1977-78 increase order—the sum allocated each year to local authorities to top up the rate support grant to cover increased costs, including inflation. This means that they will get only £430m instead of the £480m they were promised.

Mr Shore's determination to reduce still further the local authorities' budget follows their announcement last month that they had reduced their projected overspending from the £20m-£450m forecast in May, they expected to overspend by about £25m in 1976-77.

While acknowledging that this was a considerable improvement, Mr Shore said it still exceeded the standstill in expenditure agreed for this year. This year's overspending would be taken into account when fixing the rate support grant for 1977-78 so that local government expenditure would continue to the limits set out in the White Paper: Public Expenditure to 1979-80 published in February.

Local authority spokesmen were unwilling to say this week exactly what education they would bear further cuts, but there was a general agreement that it would not escape untouched.

Mr Corleth Hetherington, secretary of the Association of County Councils, said, however, that it might not suffer so much as some of the other services. "The Environment Secretary may have had the mind for economies than the key sector, where loan sanction is required. The locally determined sector is outside much of the education building programme. It covers the desirable rather than the essential elements of provision."

School furniture is probably the main educational item in this area. Other examples are what would be called recreational spending, such as swimming pools.

There was disagreement between L.E.A.s and the DES on the cost of employing teachers. "If we are right and money is limited, then you can only employ fewer teachers. This is a growing anxiety."

Mr Peter Murrells, chairman of Hampshire Education Committee, said that any reduction in the rate support grant would hit right down the lightning conductor to the education service. "Since education is labour-intensive this means that staffing will be affected."

Mr Tom Cullot, secretary of the Association of Metropolitan Authorities, said he was surprised at the Minister's decision to cut the increase order, it had not even been discussed at a meeting of the Consultative Council on Local Government Finance held only a week before.

Probably more than £50m could

be saved, "with education making its contribution here and there."

Significant savings could be made in the key sector if there were a project such as a new building had been blocked perhaps because of complications over land, the money spent could be regarded as an economy.

"At the Consultative Council meeting with the Minister, we did get a half-assurance that this is what would happen and the money would not be peddled round to other authorities."

Local authorities which have tried to get their expenditure down are resentful of those which do not appear to have tried so hard. Mr Shore told the Commons that the rate support grant for 1977-78 would exceed this year's, meaning that all local authorities would be affected, however great or small their share of this year's £250m overspending.

It is generally accepted that the top-controlled county shires have come nearest to the degree of economy the Government want. The metropolitan districts and London Boroughs, particularly those under Labour control, have made least efforts, although they benefited most in the 1974 redistribution of the rate support grant.

Mr Murrells said: "The disparity of treatment between the metropolitan districts and the shire counties will have meant an extra slingshot rate for Hampshire at the end of three years."

"For our efforts we shall get a smack in the teeth at the end of the year when the rate support grant settlement is announced."

'Aides' plan to beat unemployment

A plan to set up an American-style emergency force of teachers' aides to create jobs for unemployed staff has been proposed by Mr Sinclair Goodlad, a university lecturer.

His brother Mr Abigail Goodlad, put the plan to the Department of Education and Science in the House of Commons last week (see page 7). Mr Sinclair Goodlad, who lectures in humanities at Imperial College, London has just returned from a trip to America where he studied similar systems.

The Goodlads are suggesting a "Cascade System" in which 10 newly trained teachers under an experienced teacher would each look after 10 unemployed school leavers who would, in turn, tutor younger children. The tutors would be paid a little more than what they would get on the dole. Such schemes are used in 10,000 American schools.

"The benefits were that young pupils learnt more and truanted less with tutors closer to them in age, social and ethnic background. The teachers' grasp of the subject improved as well."

"This could do a great deal to help slow readers and those backward in maths," Mr Sinclair Goodlad said. It would also give school leavers something worthwhile to do and stop them feeling isolated. Newly trained teachers would benefit from a period of getting to know the classroom and a group of 10 young people.

"This technique works. I would like to see it as part of the curriculum of all older pupils and college students so that helping pupils lower down becomes one of the ways teachers use to get pupils to know material, just like chalk and talk at present."

Bert Lodge

L.E.A.s urged to help multi-racial writers

Young immigrant writers should be given financial help from their local authorities, a teacher-author urged this week.

Opening the annual Commonwealth book fair in St Barnabas Library, Leicester, on Monday, Mr Bernard Ashley, head of a London primary school and writer of children's books, said books about life in multi-racial Britain were just not being written.

"We need new writers to reflect the multi-racial society," Mr Ashley said. "Many immigrant authors are living in areas of lesser advantage. A little extra money outside work hours isn't likely to come by writing. So what about a little sponsorship or patronage to help underprivileged writers?"

He criticized bookshops and libraries for not providing books for children. "Commonwealth origins. Surrounding this even there are more than 520 books in 23 countries," he said. "There would seem to be no shortage of such books. Yet to go in to bookshops and even libraries would be excruciating for thinking the last 20 years hadn't happened."

Mr Ashley also criticized educational administrators and distributors for the delays in books reaching schools once they had been ordered. This applied particularly to the sort of minority interest books displayed at the fair.

"There's a web of red tape, an entanglement of inefficiency that needs clawing down. If I have to wait up to six weeks to put a current hardback title into children's hands, how long will I have to wait for one of these?" he asked.

He thought more books could be got to children of minority groups if the idea of the education bus pioneered some years ago in priority areas was copied. "Mightn't street corner storytimes on the tops of buses with books to borrow downstairs, serve as a sort of Pied Piper service to lead children, and some of their shy mothers, in through the library door?" he asked.

The exhibition, organized by the National Book League and the Commonwealth Institute, will leave Leicester on August 27 for display in Nottingham, Bradford and Edinburgh, finishing in December at the Commonwealth Institute in London.



African story at the book fair

Littered playgrounds injure 150,000 children a year

Up to 150,000 children a year have accidents in playgrounds littered with broken glass and bricks and other sharp and dangerous equipment, according to a Government survey.

An inspection of selected playgrounds by the Research Institute for Consumer Affairs showed numerous hazards, and some dangerous equipment.

These included: broken glass and bricks, wobbly ladders, steps and climbing frames, missing handrails and bolts, rusted screws and nails sticking out of equipment.

The results of the survey, published last week in the consumer magazine Which?, show that it costs an estimated £3m a year to treat children injured in playgrounds.

The magazine says most injuries are caused by falling on to hard surfaces or being hit by a swing or other equipment. The most frequent accidents are caused by falls from slides and climbing frames.

To make injuries less severe, says

Colleges best for 16-plus

Sixth forms and further education colleges should be merged into a national system of tertiary colleges, open to all children over 16, says Dr Ronald King of Exeter University, in a book published last week.

The book examines the comparative advantages of sixth forms, sixth form centres and colleges, school college consortia, further education and tertiary colleges. Dr King concludes that tertiary colleges offer the best combination of economy, egalitarianism, and range of courses. They are also popular with students.

A national policy of open access to tertiary colleges would mean the end of the sixth form. "Its death would not be universally mourned," he says.

It would have the advantage of healing the divide between academic and vocational education, and it would lessen the domination of the public school model.

The cordiality, a system of comprehensive schools from 11 to 16 year olds, might follow the primary school example and develop its own teaching methods. Such schools could be relatively small and preserve a sense of community.

In a survey of pupils in sixth forms, further education colleges and a tertiary college Dr King found that the tertiary college incorporated much of what was best in both sixth forms and FE colleges.

School and College by Ronald King, Routledge and Kegan Paul £5.95.

Alternative to dissection

Animals' Vigilantes, a children's animal welfare group, have produced a special model rabbit in an attempt to reduce the amount of dissection in school biology lessons. The model can be dismantled to show the anatomy.

The Scottish Society for the Prevention of Vivisection and the British Union for the Abolition of Vivisection each put up £500 to develop the model which is on sale at £35. Details from: Animals' Vigilantes, 52 High St, Fordingbridge, Hants.

Ulster still packing them in

One in 20 primary schools in Northern Ireland have more than 800 pupils, according to the Northern Ireland Department of Education. This is a far higher proportion than in England and Wales.

Latest figures show that in spite of the falling birth rate the province still has more primary schools with more than 1,000 pupils and 11 with more than 800.

But it does better on class sizes. Only one primary school class has more than 30 pupils, compared with 404 in England and Wales. And 12 per cent of its primary schools have classes under 20, compared with 8 per cent in England and Wales.

Pupil-teacher ratios in its primary schools have fallen steadily from 29.6 pupils a teacher in 1955-6 to 26.5 in 1974-5.

Raising the school-leaving age appears to have had the same effect as the rest of Britain. The proportion of 17-year-olds staying on for a further year has fallen. In 1973 nearly a quarter of all 17-year-olds in the province stayed on. By 1974 the figure was just over a fifth.

Northern Ireland Education Statistics, Vol 21. HMSO, Belfast £1.50.

Farm exam plan turned down

Mr Fred Mulley, the Education Secretary, has turned down the recommendation in the Hudson report that a single national validating and examining body should be set up for agricultural and horticultural training courses up to OND level.

Instead, he told the House of Commons last week, he wants a national certification scheme to be run by existing further education validation bodies.

The report of the Joint Advisory Committee on Agricultural Education, of which Professor J. P. Hudson was chairman, was published more than two years ago.

Mr Mulley said in reply to a question that he accepted the committee's arguments for a single national agency, but "after careful consideration I have concluded that it would not be appropriate."

"As with similar moves in the field of art and design, I propose that such developments be considered in consultation with bodies such as the Technician Education Council and the Business Education Council."

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The Times Educational Supplement

NUT jobs ban on school in Sweden

by Mike Duckenfield

The National Union of Teachers is joining in attempts to stop British teachers being recruited for the Anglo-American School in Stockholm, Sweden. The union is backing Sweden's largest teachers union, Sveriges Lärarlärarförbund, in a dispute with the school over union recognition and the renewal of teachers' contracts.

The NUT has written to the school's headmaster, Mr Dennis Gould, supporting a boycott on new staff until the school, a private, fee-paying institution employing 25 teachers, mostly British—agrees to open negotiations with the Swedish union on wages, conditions and job security.

The school has resisted an agreement with the union because it fears this would open the door to Swedish influence and affect the two-year contract system by which it employs staff on net wages without having to pay their taxes.

Under an Anglo-Swedish agreement, guest teachers and researchers working in Sweden for up to two years do not have to pay tax, and the school and several other employers, especially in adult education, make use of one-year or two-year contracts to hire cut-price staff.

The dispute, however, has gained added importance because of claims by the Swedish union that the contracts conflict with a law on job security passed two years ago. This says that employees given a certain amount of work in one year must be offered at least as much in the next, or be paid the equivalent wages.

If the union's claim is upheld, teachers wishing to stay in Sweden for a longer time could keep their jobs and be paid full wages. In addition, employers might have to cover their employees' liability to pay back taxes on previous income. This would mean the end of the current contract system and have major repercussions on future recruitment.

The dispute began at the school this March when the teachers asked the Swedish union to take up their case and negotiate a collective agreement. When the contracts of two teachers were not renewed at the end of last term the union put a boycott on future jobs and when the school sought work permits for three new teachers—two British and

one American—they were turned down, following the customary consultation between the immigration authorities and the union concerned.

However, following the personal intervention of Mr Gould and a deputation to the Foreign Ministry by representatives of the British and American embassies, the decision was reversed.

The union, which is still fighting to have the permits blocked, says that if the teachers are allowed into Sweden it will amount to strike-breaking and their members in the school will cease work if negotiations on a collective agreement do not start by September 1—a week after the start of term.

In the meantime the union has written to the three recruits telling them their view and asking them not to take the jobs.

The school, which caters for 400 pupils, aged 15 to 16, from the families of diplomats and businessmen, is run as a non-profit foundation by a board of 14 governors, under the patronage of the American ambassador, Mr David S. Smith.

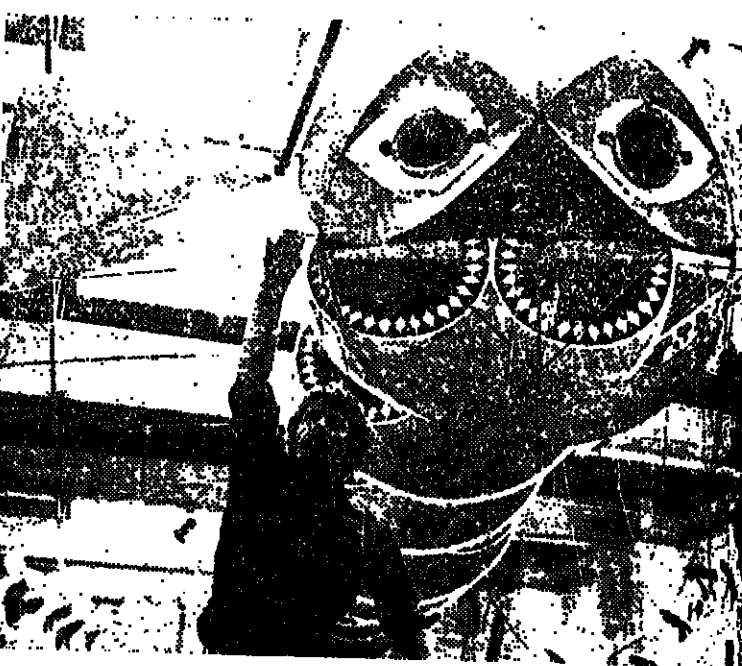
Mr Gould says he makes it clear to all applicants that contracts are "virtually non-extendable" and that the school is a special case relying on a turnover of teachers to bring in fresh ideas from Britain and maintain the unique Anglo-American atmosphere.

However, he admits that the main reason for opposition to the union's claims is financial. An end to the contract system and payment of full wages to all would add about 20 per cent to the annual wages bill and lead to a rise in fees.

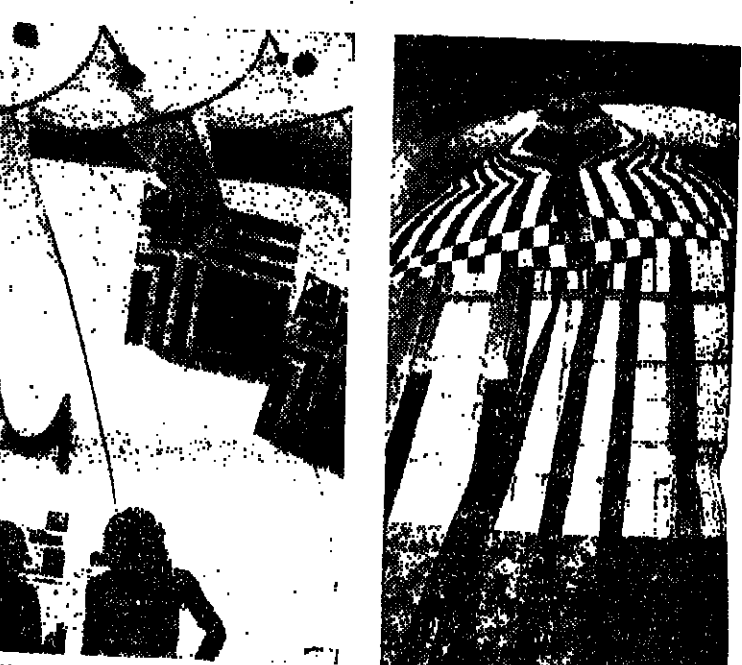
Teachers in the first two years earn between 2,500 Skr and 2,800 Skr (£316 to £354) a month—equivalent to the take-home pay of their colleagues in Swedish schools. Those on full-pay earn between 4,000 Skr and 4,500 Skr (£506 to £570). Extra costs would therefore be in the region of 200,000 Skr (£25,000) a year, equal to a 600 Skr (£76) increase in fees per pupil.

Mr Michael Fyfe, principal of the British Institute which runs English courses for adults, but recruits staff mainly in Sweden, said, "This is a very important precedent. It could lead to a tightening up on job security and tax dodges or encourage other employers to recruit on short-term contracts simply to cut costs."

Flights of fantasy



The dream of flight, an exhibition of kites and aerial sculptures at the Institute of Contemporary Arts, London until August 23. Above: American artist Tom van Sant with a 300ft kite he built. Below: visitors and exhibits.



importance of the area for Irish literature and to the number of authors the tiny hinterland had produced.

One of the first acts of the new Minister for Education, Mr Burke, in 1973, was to reopen the school. At one stage, he even sent some of his own children to it, boarding them out in local homes (Mr Burke is himself a mellifluous Irish speaker).

The school's numbers have now dwindled to single figures, but it remains tenacious, open, like many of the other small schools which have special characteristics, such as the fact that they cater for a linguistic or religious (Protestant) minority.

Mr Burke greeted the NESC report with a statement reminding people that he had in fact slowed down the process of amalgamating schools. Reading between the lines of the 1973 speech in which he cautiously announced this shift in policy, it is possible to see that official thinking may be veering



John Horgan

Tories put Minister to the test on standards

by Alan Wood

The Conservative Party's preoccupation with standards in schools dominated Commons questions last week. The Minister of Education, Mr Kenneth Robinson, was asked a series of questions by the Opposition, including one by Mr Norman St John-Evangelist (Chelmsford, C), said there was more of a problem with numeracy than literacy. A recent conference of vice-presidents of technical institutions stated that 16-year-old pupils had a numeracy of only 11 years. Would he be less complacent on the importance of numeracy but

Miss Jackson replied that many comments and assumptions were made by many people in education, not just about standards of numeracy. However, she was not aware of any sensible, valid statistical evidence. Indeed, the Opposition was basing its comments on a total lack of understanding of the evidence.

Mr Rhodes Boyson, an Opposition spokesman on education (Brent, North, C) said there had been a full 25 per cent in the ratio of pupils to teachers in the past 25 years. This should lead to better standards but it had not. Did this not show that the quality of teachers and their teaching methods were as important as pupil-teacher ratios?

Miss Jackson said Mr Boyson was only too willing to seize on any piece of evidence to try to prove that teaching was getting worse. She said that preliminary estimates for January, 1976, showed that teacher-pupil ratios in primary schools in England and Wales were about 1 to 23.9 in primary schools and 1 to 17.0 in secondary schools, giving a combined average of about 1 to 20.3.

Questions

A levels—Miss Margaret Jackson, Under Secretary of State, said she expected between 16 and 17 per cent of 18-year-olds in England and Wales to take two or more A levels this summer. Full details were not available.

Teaching methods—Miss Jackson said she was not convinced that in present circumstances a widely independent investigation of teaching methods in schools would produce useful results.

Teachers—Mr Colin Shephard (Harrow, C) asked how many extra teachers could be taken on if employed teachers were to forgo one year's increments. Miss Jackson said about 12,000 could, but the Government's policy, reflected

The South East Essex Sixth Form College, or Seeciv as it is known in South Benfleet, is open to any 16-year-old in the area and has developed a wide variety of courses. It was purpose-built in 1973 for 750 students, but now has more than 800 and is expected to expand to 1,000.

The college is popular with students. They like its well equipped buildings, open plan laboratories and workshops, theatre-in-the-round, restaurant and sports hall. They like the easy going atmosphere being treated as adults not having to turn up every day and the good relationships with staff.

They also appreciate the wide range of courses. By combining the sixth formers of ten 11 to 16 schools it is able to offer 28 different A levels, including subjects like theatre studies, computing science, business studies, sociology, social biology and languages such as Italian, Russian and Spanish.

The college offers 21 O levels and has pioneered CEE courses including English, European studies local history, applied biology, and scientific studies for arts students.

Mr J. L. Glazier, the college principal, said it was often better to do a CEE course than repeat CSE or O levels. Students taking mathematics CEE could use calculating machines so arithmetical skills were not necessary.

For students unlikely to benefit from examinations, there is a foundation course which covers mathematics, English, social, environmental studies and work on the media. Mr Glazier saw it as a chance for late developers and low achievers who needed a fresh start. They aimed to develop their numeracy and ability to mix with people.

Students who develop unexpectedly well on the foundation course could, however, take English and mathematics and go on to two other CEEs. Last year there were 66 students on the course. This three-year streaming is not intended to be a rigid division—and it suited some students particularly well. A girl in a CEE silver-smithing class said how pleased she was with the variety of courses she could combine with A levels.

Though clearly many still see the college strictly in terms of university training, this girl's attitude was by no means isolated. Some of the 16 to 18 leaver schools too have noticed the same drop in academic ambitions amongst sixth formers.

Mr G. W. Taylor, headmaster of the Deane School, Thundersley, Essex, said: "Some students are far from happy now with the idea of doing three A levels and the university. Even though they may be able to, they are far from committed to doing a degree."

Mr K. Wood, head of Sweeney School in Rayleigh, said 16-plus transfer often pushed children into the 16 school, but he was surprised if more stayed on if we had our own sixth form here. If they did, I would want to ask why? Were they the ones who did not want to go out into the big wide world?"

He felt it was the job of the 11 to 16 school to encourage those who would benefit from sixth-form work considered it seriously.

Some feeder schools are, however, concerned about the lack of a sixth form and its effect on school life and teachers' jobs. The most common complaint was the hole this left in sport, music and drama.

"It's a tragedy," said Sweeney's head of PE. "You are always teaching the situation properly, Judge Edward Jones said."

He failed to consult other members of staff and on at least one occasion deliberately avoided an interview with Mr Hill. Moreover, he did not have a fair hearing before Nicholas Hill, who is now 18 and taking A levels at another school. "I find myself quite unable to say there was any justification for expulsion," the judge added.

The escapade which led to expulsion happened at the end of

Sixth sense?

Many 16-year-olds, faced with bleak job prospects, will be deciding to stay on at school after getting their examination results this month. For some, sixth form colleges, much praised in a recent report from the Headmasters' Association, can provide the ideal environment, offering a fresh start and a wide range of studies than the traditional sixth form. But not everyone is happy with the way they denude the schools around them of older pupils or is convinced they offer something for everybody. BOB DOE reports on a visit to an Essex sixth form college.

No one knows whether this attitude is a result of the wider opposition to the college offers. It is possible that the traditional academic sixth form was more successful at narrowing sights.

Independence is emphasized at the college. This could lead to an "independence crisis" and drop out. Mr Glazier said, but it was better that they happened in a stable, domestic background, than later on when students were away at university or in a job.

The heads of feeder schools were not too concerned about this. Mr P. S. Watkins, head of Furtherwick Park School, on Canvey Island, a largely working class area, said young people were conditioned to early jobs, marriage and children, and had little use for further study.

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The escapade which led to expulsion happened at the end of

ing basic skills and never get a chance to coach excellence."

The Headmasters' Association report said sixth form colleges attracted more highly qualified teachers into the profession. But some 11 to 16 schools had found otherwise because they could offer no sixth form work.

Mr Taylor said: "Teachers obviously want to experience as many ages as possible to further their careers." They were always likely to lose their best teachers to schools with a full age range.

He admitted that open access to the sixth form was "social engineering." "I want the leaders to understand the job better," he said.

Not all students were happy about the system. One girl was convinced that every disruption in the college could be blamed on the foundation students. "They're always shouting in the corridor and making about in the common room. I never go there. We always go up to the coffee bar for a talk."

Another boy had felt the same to begin with. "When I first came here, I thought this other lot shouldn't be here, but that would mean only mixing with others doing A levels. I make lots more friends this way."

The report from the Headmasters' Association on sixth form colleges said the break at 16 helped students mature and "a necessary weaning from the protective environment of school." Some people have argued that they would mean fewer working-class pupils staying on.

The students at Seeciv were unanimous that 16-plus transfer was more likely to make them stay on rather than less, but then those were the pupils who had accepted the challenge. The principal believed encourage their children to stay on, the natural break, and the greater travelling distances within the college's wide catchment area, might increase disaffection.

The weighting given to sixth formers meant 11 to 16 schools had fewer scale posts to offer than 11 to 18 schools with the same pupil numbers.

But a teacher at Sweeney School said: "Staff at the college are in a far worse position. They would have much greater difficulty in getting promotion in an 11 to 18 school than I would with experience of teaching under 16s." A colleague from Furtherwick said the same. "That's not teaching up there," he said. "It's just not part of the real world."

More than 90 colleges are now planned or in existence and staff at the South-East Essex College are asking where they go from here. For the 16-year-olds, who are asking the same question, the chances available in South-East Essex are as wide as they could hope for.

Head was wrong to expel boy, judge rules

The headmaster of an independent school near Southport, Merseyside acted in a "wrong, unjustified and unreasonable" manner in expelling a boy after a prank, a judge declared last week.

An Liverpool County Court judge, Mr Gerald Hill, of Sanderson Lane, Mawdesley, near Ormskirk, was awarded £348 damages, plus costs against Seeciv, a sixth form college near Southport, after finding that Mr Charles Oxley, had failed to

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Sport



British Eight at Villach (left to right): Mark Howe (Hampton School); G. Thomas (Bradford-on-Avon RC); P. Head (Hampton); A. Cusack (City of London); A. Brown (Pittenger's Grammar School and Bradford-on-Avon RC); S. Hurbit (Springhill RC); T. Meek (Springhill); stroke: C. Mahoney (Hampton); cox: D. O'Flaherty (St George's College).

Jim Railton, rowing correspondent of "The Times", fills in the background to the world junior rowing championships in Austria.

East wind bites the oarsmen

The world junior rowing championships, which are being held in Villach, Austria, this week, can, with some reservations, be regarded as a breeding ground for Britain's future Olympic rowing teams.

The junior championships were not officially designated world championships until 1970. Before that, they carried the title of FISA junior championships or the junior championships of the International Rowing Federation. It was felt that the under-19 group of oarsmen should compete in their club or school colours with no national flags, vests or anthems so as to keep away the attendant pressures of international prestige and sporting politics.

For the first champions in Ratzeburg, West Germany, in 1967, the British competitors, drawn from schools and clubs, set off by bus and ferry and returned with a gold medal in eights, won by Eton College. Three other British crews reached the final six places on Friday, the British junior team departed on a British Airways chartered jet, a sign of changing times.

In Amsterdam in 1968, the complexion of the championships began to change with the first appearance of crews from East Germany (competing under club names). The East Germans took the eights—the prestige event—by some seven lengths, with Eton

in second place and British schoolboys and junior club oarsmen taking one other silver, and two bronze medals.

The East Germans did not appear for the 1969 championships in Naples because of a dispute with Italy over the playing of a national anthem after a boxing tournament. So politics in an indirect way had begun to make their presence felt. By 1970 the International Rowing Federation had weakened or strengthened, according to the point of view, and the first official world junior championships took place in northern Greece. The East Germans, resplendent in national colours made a clean sweep, winning all seven events. Since then the championships have taken on the pressures and prestige of a fully fledged international championship.

Since 1970 Great Britain has sent 43 crews to the championships, won four silver and three bronze medals and gained another six places in the first six with only six crews failing to make the consolation finals. It is a reasonable tally against the national training systems operated by East and West Germany and the Soviet Union.

While the British juniors have not yet been under the influence of a national training team system, there has been a definite move towards composite crews—crews containing members from several

clubs or schools. Four of the seven British junior team entries in Villach are composite, including for the first time, the British eight.

One of the outstanding British coaches on the junior international scene is Mr Bruce Grainger, a teacher at Wallingford School, a fully maintained state school. Mr Grainger made his debut in the 1972 world junior championships with a coxed pair from his local club. They won a bronze medal. Since then Mr Grainger has collected with Wallingford Schools' crews, three successive bronze medals in coxed fours and pairs. In Villach this week with three of last year's coxed four still available, he will be attempting to change the colour of the medal to gold or silver.

Mr Grainger's achievements are remarkable, with material gathered from a small community in Oxfordshire. If his training methods were followed by other juniors, our medal tally would be increased considerably.

Seventeen of the 29 British junior team in the seven crews competing over the 1,500 metre Lake course in Villach this week are drawn from the following schools: Hampton Grammar; St George's College, Weybridge; Becket, Nottingham; St Edward's, Oxford; King's, Chester; John Mason, Abingdon; Abingdon and Wallingford Schools.

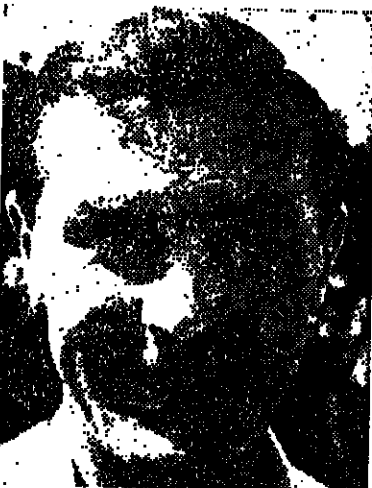
Schoolboys take over Old Trafford

by Asif Khan

Schoolboys from all over Lancashire were taking part in a new cricket event at Old Trafford this week. Called the Under 16 Coaching and Cricket Festival, it has been organized by the Lancashire Youth Cricket Council and is sponsored by the Greater Manchester Council and the National Playing Fields Association. Lancashire County Cricket Club have provided the ground.

Eight teams representing all the areas covered by the LYCC played 12 games under the John Player League rules, limiting an innings to a maximum of 40 overs. The teams played in two pools during the first four days of the festival, which began on Monday.

The winners of each pool were today contesting for the Cedric Rhodes trophy, named after the chairman of the county club.



Keith Andrew: forging links

The festival is the culmination of a coaching programme in which hundreds of schoolboys and 50 coaches took part. Each boy was nominated by, or through, a club. The festival was suggested by Keith Andrew, the former Northamptonshire captain and test cricketer, who is now the National Cricket Association's national coach for the north, based at Old Trafford.

Mr Andrew, who previously taught at Spina School, Twycross, and Northampton College of Technology, said the idea was to promote cricket among the young and forge links between the schools and clubs.

People

Top job for Harry Judge

Dr Harry Judge is to be the new chairman of the School Broadcasting Council, which advises the BBC on school broadcasting policy. Dr Judge, who is director of the Department of Educational Studies at Oxford University, will take over from Dr Alfred Thomas who is retiring at the end of the year. The BBC also announced that Dr Patrick Nunn, director of Leeds Polytechnic, will be the new chairman of the Further Education Advisory Council when Sir Lincoln Ralphs retires in March.

Professor David Wilson, professor of medieval archaeology, University College London, is to be the new director of the British Museum. Mr Geoffrey Morris, principal education officer for Cambridgeshire, is to be the county's chief education officer.

Schools
Mrs Eve Boyd, of the ILEA Centre for Urban Educational Studies, Highbury, is to be head of Honeywell Infants School, Battersea, London, in succession to Mrs A. R. Harding, who is retiring.

Dr David S. C. Arthur, rector of Greenfields School, Cumberland, to be principal of Lonsdale School, Helensburgh, a new educational school which opens in September, 1977.

Mr John O'Brien, head of William Blakely School, Bittersey, London, to be head of the new Sir Walter John's comprehensive, formed by a merger of his school and Sir Walter St John's.

Mr Samuel Johnstone, deputy head of Wyborne Junior School, New Eltham, to be head of James Wolfe Junior School, Greenwich, London.

Universities
Professor J. P. W. Rogers, professor of English, University College North Wales, to be the second chair of English at Bristol University. Janet M. Batley, reader in English at Birkbeck College, London, to be the chair of English language and medieval literature at King's College.

Dr T. L. Craft, senior lecturer at the Institute of Obstetrics and Gynaecology, London, to be the chair of the Royal Free Hospital of Medicine.

Professor T. Schlosky, professor of economics at Stanford University, to be the chair of economics at the London School of Economics and Political Science, London.

Dr H. G. Widdowson, lecturer in linguistics, Edinburgh University, to be the chair of education at the Institute of Education, London.

In brief

'Death trap' destroyed

Twenty-six wooden classrooms were destroyed by fire at Kingsfield secondary school, Kingswood, Bristol, at the weekend. The building, which was put up as a temporary measure in 1920, was described by Tony Yeaman, a governor, as a "death trap".

Art of communication

The Media Reporter, a new quarterly concerned with media studies, mass communication, and training in journalism, is to be published in the autumn. Mr James Brennan, former lecturer in journalism, is leaving The Guardian to edit it.

Specialist skills

Courses leading to diploma awards by the Technician Education Council were announced last week. They comprise study programmes in computing and its related specialist skills at the Polytechnic of Wales and four technical colleges, and a new training establishment. They begin in the autumn.

Social work

Three leaflets have been published by the Central Council for Education and Training in Social Work to advise young people, graduates and people who want to change their careers on possibilities in social work.

Threats to environment

Bath University has received a grant of £17,000 from the Science Research Council to investigate threats to the environment.

12/13

Community theatre/Russian research

15/17

Books: sociology; mathematics textbooks

18

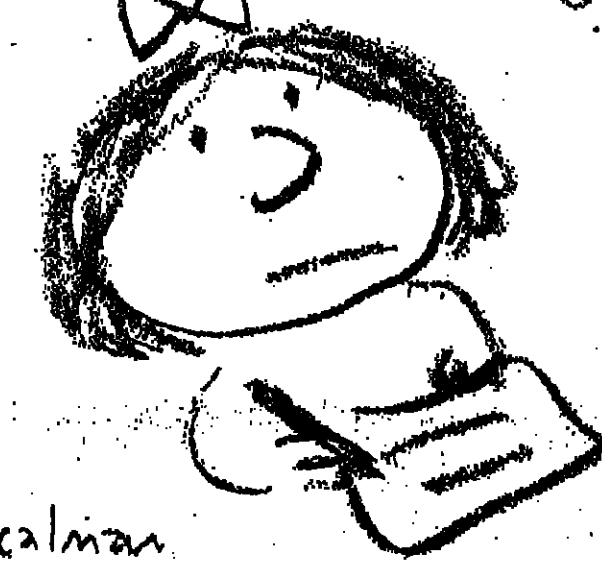
Resources: language development

27

Talk back: interviews; assessment; learning exchange

Rituals ancient and modern

La plume de ma tante is très boring...



Harry Radford

argues that the newer materials and methods used in language learning can prove as dull or abhorrent to students as the old

No more Latin, no more French, no more sitting on a hard board bench, no more English, no more stick, no more flippin' arithmetic...

Our schools today are often lambasted as centres of turmoil and uncoordinated excitement, wherein jingles like the above no longer mark the end of term, but the end of all worthwhile learning. Paradoxically, despite the fears of placement innovation and the spectre of school life over the years has surely been its remarkable reverence for convention.

The pattern of behaviour emerging from that classic anthology of childhood by Iona and Peter Opie *The Lore and Language of Schoolchildren* shows an extraordinary continuity, regularly transcending both time and distance. More recently, Desmond Morris in *The Human Zoo* produced a compelling account of "the rituals of modern education", from initiation procedures to what he terms the "high ritual" of the exam process.

Mr Morris, inveighing against the conformity pressure exerted by this so-called educational machinery, and the learning of dogmas which it imposes, reminds us of the emotional trauma as well as physical pain administered to the young in most human societies before he deemed mature enough (ie, properly initiated) to take his place among the elders of the tribe. From the Renaissance until the mid-twentieth century, generations of schoolboys in western Europe were familiar with one form of such a rite, the magisterial beatings doled out to initiate them into the mysteries of Latin.

While few schools nowadays would tolerate regular flogging as a technique of foreign-language instruction, this segment of the curriculum more than most has continued to depend on the enactment of certain formal observances, however physical, anguish. Surely no school subject is more steeped in ritual, than the study of foreign languages. The teachers are generally French now, but they are symptoms of the same disconnection.

All sounded plausible enough, but in practice dogma too often overruled judgment, producing only farce and caricature. Thus, for the unwary teacher, constrained by fashionable taboos about the use of English, French by modern methods became a test of sheer stamina; even the labour of transporting heavy hardware and an assortment of aids across rain-swept yards, down corridors and steps, made a peak of physical fitness indispensable.

For the pupils, the new fetish, the tape-recorder, soon became an object of loathing (as Clare Burstall reminds us in *Primary French in the Balance*). The buzz and click of the projector, the metronomic bleep of the tape, the soothing and stuffy penumbra, the rhythmic

of quantity expressions, negatives, demonstratives, possessives and other seasonal grammatical phenomena. Memories of the days when translation, grammar and the written word were deities, when verbs were recited, vocabulary drilled, when dictation was part of this weekly ceremonial at the altar of language study, are still fresh in our minds.

Prose composition was—and sometimes still is—the most fearsome cult of all. How often in our endeavours to prepare our flock for Judgment Day (the GCE exam) have we all found ourselves cast in the role of the mighty Solon, the source of ultimate wisdom (with the model translation to hand, of course), scornfully rejecting the thimble offerings of the linguistic peasants before us, as they vainly sought to construct in a foreign code an approved version of some English text?

In the crueler forms of this ceremony the presiding teacher might more aptly be likened to a sadistic commandant, directing his pupil-victims to march into a minefield (perhaps it is no coincidence that even in the enlightened seventies a favourite analogy for school; among the inmates, is Colditz). As teachers, the ritual "prose" no doubt greatly boosted our ego, though one blanches at the thought of its effect on the average learner's morale.

In the aftermath of a war which had harshly exposed the failure even of our selective schools to produce enough competent linguists, technology as the handmaid of revolution ushered in more sophisticated methods and materials. The ancient ritual of tests and translations was duly supplanted by a new, more demanding prescription—oral by headset, and filmstrip French.

New courses were pressed into service, old ones revamped. All claimed to be lively, carefully graded, fully integrated, all subscribed faithfully to the latest audio-visual creed with its tapes, filmstrips, wall-charts and workbooks, all boasted the impeccable ancestry of *le français fondamental*. In every preface the catechism followed by Crefit was reiterated, the sequence of language skills expounded, the primacy of the spoken word upheld.

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repetition—all served gently to numb their faculties, like the proverbial lotus. They were hypnotized, mesmerized, by the weary chanting of meaningless utterances, by the endless monotony of artificial questions round the class, by the remorseless pattern drills. Bored, discouraged and bewildered, most were soon counting the days to their release from this new purgatory.

Yet this unhappy situation derives not merely from the tedious uniformity and aimless ritual of so many audio-visual happenings, perpetrated by mediocre teachers fearful of committing a heresy if they disregarded the established code of practice (grammar by induction, and no English to dispel confusion). The materials themselves are equally at fault. Despite their scientific pretensions, a surprising number of popular courses make little attempt to bridge the gulf between the learner's maturity and his linguistic innocence.

The content of most texts and dialogues in these vital early stages is depressingly conventional, painfully stereotyped, devastatingly dull. They are an affront to the intelligence of the normal adolescent, presenting a coy, contrived, Janet-and-John world of exclusively middle-class bores and their precocious pets.

All of these tedious families, inhabit spacious apartments or suburban residences, equipped with every modern convenience except a lavatory, and usually set in acres of garden. All make the inevitable pilgrimage to uncle's farm, all go fishing and catch old boots, all visit the zoo and compare the monkeys to their bald, bespectacled teachers, all have picnics and lose their sandwiches to marauding goats or similar predators. The humour is limp, while the banal,

clockwork existences described are too overtly a mere pretext for exercising parts of speech. There is no flicker of warmth or natural emotion in the relationships of these dreary marionettes, no hint of sex, save in the utterly stylized roles in which male and female are cast (the upholders of the Sex Discrimination Act would have a field-day).

Can we seriously expect today's adolescents to respond favourably to such puerile adventures? This traditionally "soapy" subject-matter has probably contributed significantly to the negative attitudes towards foreign languages. When it is also enshrined in a ritualized, ossified form of presentation (whether the ritual be ancient or modern), the whole exercise becomes so paralytically boring that one can hardly reproach the victims for voting with their feet.

There are honourable exceptions, of course, notable among them being the recent expensive package of materials from Crefit, appropriately entitled *De Vive Voix*, not to mention the innovative series of language broadcasts on television and radio. But ritual French dies hard and in countless schools continues to provoke yawns, pangs of embarrassment or sometimes abhorrence. The moral is clear enough. No amount of pseudo-science, of equipment, graded vocabulary or formalized systems, can atone for the absence of skilled, sensitive teaching. It is not science but art that is lacking, and we in the training institutions must accept a heavy share of the blame.

Harry Radford is tutor in modern languages, Oxford University Department of Educational Studies.

How Cuba mixes studies and sport

by Stanley Levenson

Before the Olympic Games in Montreal Alberto Juantorena was unknown outside the athletics world. Even inside he was something of a mystery.

Now the whole world has heard of this brilliant runner from Cuba who became the first man in Olympic history to win both the 400 and 800 metres races.

His exploits on the track have been well recorded. Less well known is the context in which he works as a student of economics at the University of Havana.

Juantorena is 25 and has a wife and an 18-month-old child. He has his own flat and receives a stipend of 100 dollars a month; other students receive less, but because he has a family he gets about 20 to 30 dollars more than the others.

He comes from what he describes as a family which was "very poor and humble" before the revolution. In 1959, now his father is a building worker and Juantorena has had the chance to go to university.

Although he trains every day, he is not excused any scholastic duties. When big international events, like the Olympics or Pan-American Games come up, problems arise.

How these are solved was explained to me by Pablo Ruiz, deputy director of the Cuban National Institute for Sports and Recreation (INDER), which is roughly equivalent to our Sports Council but more powerful and effective.

INDER, Juantorena, his coach and the dean of his faculty sit down and plan how to marry studies and the demands of international sport. They work out a schedule, pre-

gramme to which all sides are expected to adhere.

Sometimes this means postponement of examinations. Juantorena was due to sit his June, a critical period before the Olympics. Those will now be taken in late August.

Pablo Ruiz said that this same process of consultation with deans members of the Cuban team in Montreal, about 140.

Ruiz and Lazaro Betancourt, Cuba's chief athletics director, all emphasized what a disciplined person their famous compatriot was. He never missed training, and never dodged studies.

Juantorena himself, a tall, imposing figure, is a very good student.

At a higher level Cuba now has a graduate physical education school, such of six provinces. Intake varies from 500 to 1,500 students. A higher level institute in Havana has 750 students.

This basic structure impressed many people. In Montreal—almost as much as Juantorena's almost superhuman exploits.

Coch Betancourt says that Juantorena has made a revolution in the 400 and 800 metres running. "He 400 metres runners can't do well in the longer be a middle-distance race but a sprinter."

ing man, says the same thing. "It is vital to be systematic."

In Cuba, as in Britain, the sports stress is in the schools, the power base supporting the pyramid. There are some 500,000 schoolchildren in Cuba, most of whom in residential schools. All of them have to take part in six compulsory sports as part of the physical education curriculum—baseball, basketball, volleyball, athletics, Olympic gymnastics and modern gymnastics. They have three one-hour sessions a week.

The next important stage is their National Scholastic Games, a huge event of many sports involving boys and girls from 11 to 18 years. In the case of swimming the age is restricted to 14. All this is not very much different from what happens in Britain except that there is a far "better" post-school "spotting" system. Few talented youngsters are missed.

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Tennis for beginners

"Learn to play tennis," a course for beginners of all ages, is being held at Brunel University, Uxbridge, Middlesex, from Mondays to Fridays until the end of next month.

Aids include instant television replay, video recorder and an indoor court for bad days. The week's details from Tennis, 61 New Road, Hillingdon, Middlesex (phone 01-561 6607).

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Company shares

Heather Neill looks at the work of the Hoxton Hall Community Theatre and Education Project in the East End of London

A group of dissatisfied teachers who have opted out of the system to teach drama by their own methods—this might be a description of the five men and two women who run the Hoxton Hall Community Theatre and Education Project. But though true, such a description would be misleading, implying the kind of reckless, anti-establishment fervour common among the very young.

In fact, the group, almost all in their thirties, impress with their thoughtfulness, seriousness of purpose and lack of "theatricality". A good deal of self-questioning has gone on since the project started. One is liable to be handed sheafs of multi-coloured duplicated sheets setting out their aims, and principles, suggesting a need to define and redefine their intentions accurately as much for themselves as for anyone else.

The project is an unusual one, in that it sets out to bring theatre and other cultural activities to the whole community, but confines itself to the square mile of Hoxton. This small area of East London has a tradition of theatre: the first London playhouse was, after all, opened not far away in Shoreditch 400 years ago.

Hoxton Hall itself was built in 1863 as a place of entertainment, the delights of which were described by a local paper of the period: "It provides a drop of good beer, a comfortable seat in an elegantly fitted and brilliantly lighted hall, music that would do credit to many a second-class concert room, and information on all the important events of the day." The "elegantly fitted" hall is still in use, though at present undergoing long-needed renovation, and is worth a visit for its historical value alone.

The hall and the adjoining premises, built in 1910 by a Quaker charity, the Bedford Institute, later became a centre for all kinds of educational and recrea-



tional activities. Against this background, the Community Theatre and Education Project was set up last September. Most of the group had worked together previously on productions at the hall with an amateur company based in Nevern Square. They share responsibilities equally: Barclay Price is, officially, the administrator and Terry Goodfellow the warden, but everyone takes turns of duty. This sharing is crucial to their philosophy and method. A play is devised gradually through improvisation based on discussion, without anyone directing the enterprise as a whole, but with everyone being free to take charge whenever he or she would

like an idea worked through.

It is an unselfish way of working: all hobbyhorses, all individual desires must come second to the needs of the company. Naturally, it is not always so easy. As John Rake, one of the group, says: "You sometimes have to make difficult decisions about the importance of something you want the play to say; when should you give up fighting a point for the sake of general agreement?"

When I first met them, the group were improvising ideas towards preparing a play for primary schools. They had only four weeks, spending three days a week on this particular project (the other two days being occupied by different regular

activities) to get together a working version of the play—they do not aim to have a written script.

A this point Terry was playing a creature, half plant, half animal, that had been discovered by a little girl in the fields near her village. She had decided to make friends with it. Her family and the other villagers apparently failed to understand her, being annoyingly grown-up and cutting her out of their conversations, while becoming more and more frightened of the alien being.

Already the point was clear: children, while being misunderstood and excluded by "sensible" adults, might be wiser in

correlation techniques, and will form the basis of further research in other schools. The researchers say these experiments will be invaluable in developing community spirit in schools. Until more is known about how teachers control pupils, and are in turn affected by the children, say Russian psychologists, it will not be possible to realize the aims of education.

However, those who hold this position have not yet voiced the idea—now gaining ground in the minds of some sociologists in Russia, judging from theoretical papers and books—that asking questions about human interaction may in itself give rise to new thoughts about the aims of education.

More controlled experiments involving the expression of pupils' opinions of their schools and teachers are to supplement work being done in psychology institutes. So far the pupils have not been invited to comment on the usefulness of the research, but as Russian children have not yet acquired the full range of "new-man" characteristics, we may be certain that they enjoyed criticizing their teachers' performances.

As the research continues the pupils will realize what is made clear in the findings: that the "communicative" aspects of education are significant in forming the personality, both of the pupil and of the teacher, especially the pedagogical and management capacities. In other words, the children may learn that it is not unreasonable for those seeking objectivity to look at the teachers as well as the children in the class.

Sociological research is now growing fast in most areas of Soviet society, and its citizens are becoming used to being

rolling schools and wonders how, otherwise, teachers can get to the essence of the learning process without "descendental analysis, liberalism and super-

Inside schools, where the teaching process is defined in strict Marxist fashion as a synthesis-yielding interaction between teacher and pupils, some teachers are looking for more information about the feelings and attitudes of, and the social influences on, their charges. If what they do is a continuing process, they argue, more must be known about the components of the interaction. This means research must be done on teachers as well as pupils.

V. N. Turchenko and L. G. Borisova, in a book on social-pedagogical difficulties of teachers, emphasize the need to study teachers, employed as pastoral carers in schools, interact with other teachers, since this vitally affects the school life of children.

The child's view of the teacher is so far little understood. Recently, 155 pupils aged 14 to 17 years were asked to grade their teachers in terms of love for children, strictness, fairness, ability to explain lessons, to keep order, and flair for talking interestingly. The research done by two schools by a team from the Drogobych Pedagogical Institute, is part of a wider study of the social-psychological compatibility of teachers and pupils.

The research was two-way. Teachers assessed pupils according to conventional criteria of attentiveness, self-discipline, courtesy, and so on; and were themselves assessed by their own head-teachers and outside inspectors.

Findings were processed by multiple-



the long run as they felt free to follow their instincts. Elsie Pilbeam is a natural choice for the girl, Small, with copious dark brown hair, often worn in a plait, she has no difficulty at all in suggesting the directness and simplicity of a child.

Some weeks later, at a performance of the play, now called *Dance till the Rain Comes*, in a local school, it was obvious there had been many changes. A topic of current discussion, the drought, had been introduced, and so had some exciting percussion, which culminated in a dance designed to induce the gods to send rain, and a little reminiscent of the Inca rituals in *The Royal Hunt of the Sun*. This was the high point of the play.

Something of the clarity of the original intention had been lost in the new complexity of the plot, involving a greedy lady of the manor (played by Margaret Shepherd) who puts up the grain prices and keeps too much water for herself, a bullying official (David Sulkin), a gypsy (David Urie) and a cheating baker, as well as the inexplicable creature, now decidedly more animal, all played in an imaginary far-off place and time.

But the children took to Elsie quickly and there were plenty of ideas which could be drawn on by the teachers: people's unfairness to each other in times of stress, their need for a scapegoat, and

concepts of responsibility and authority in the adult world as well as the child's. There are perhaps too many ideas. This is, of course, an inherent danger in this method of working. One can become so familiar with the material that it is easy to take too much for granted about what the audience can assimilate. For this reason, it was a little disappointing that the (admittedly curtailed) drama session afterwards dealt in practicalities—such as the occupations of people in more primitive times—and points directly derived from the play, instead of relating the more abstract ideas to the children's experiences.

The play itself is successful in two

observed through the social scientist's microscope. Judging from letters to the Soviet press and articles in learned journals, traditional teachers and Party workers at the lower levels, as well as many parents, believe that the classroom is a place for executing clearly defined procedures of transmitting conventional wisdom to minds made ready by formal controls.

Other teachers, especially younger ones recently out of college, rejecting such mechanical clarity of vision, say that the temporary teacher should be on the lookout for a bit of empirical adventure. Some educationists who have closest contact with the latest ideas in the higher educational colleges go farther and claim that continuing efficacy, a fresh approach to routine tasks, and keeping boredom away can result only from a planned involvement with research and experiment. The latter see this trend as part of the scientific-engineering revolution.

Soviet ideologists entrusted with the task of explaining the sociological method to the other ranks say they believe in the value of a dispassionate analysis of the ways in which social assessments and experiments are made in schools—that is, about the value of research into research. Other people, who are uncomfortable about such an analysis, seem to say that if it were done when it is done, it would be well it were done unconsciously and certainly not dispassionately. The debate has thrown up a serious problem for Soviet education which now has to decide at which points, and by what means, educational research should be initiated. Most people in the decision-

making strata know what Lenin ordained should happen. But they are beginning to suspect that the words of the great man can be modified by the dialectic.

To the Soviet Marxist, science, having become the motivating force of production, is now largely determining the character of man himself. The scientific approach has invaded many areas of human activity, and scientific advances are reflected in the work of higher educational institutions.

Academician V. A. Buravikhin, writing in *Sovetskaya Pedagogika*, criticizes some Soviet teachers for hindering the search for new methods by their adherence to traditional methods, even to the point of making them a fetish. Teachers, he says, must become more scientific. Yet he goes on to warn of the dangers of uncontrolled experimentation and research projects initiated "from the bottom".

Dr Buravikhin has a practical proposal for making teaching more scientific. New methods should be developed by looking at the similarities and differences of the memory of the human brain and of the memory of the electronic computer; the optimization of the reception, storage and use of information; the attainments of experimental psychology; the theory of information and cybernetics.

An electronic computer is now being developed from thin magnetic films, whose volume in principle may be equal to that of the neurons in the brain, and in which the velocity of remagnetization of each memory element reaches a milliardth of a second.

The scientific approach to teaching,



Far left and centre: the Hoxton team lay on a drama workshop for children at Thomas Fairchild Primary School.

Left: the community aspect of the team's work: street theatre in Hoxton's Curtain Road.

respects however: it is a mine for the imaginative teacher and it is an attractive piece of theatre. Although the group has an excellent relationship with the schools in the area, and had visited this one before in order to hold drama sessions for a period of four weeks, they are just as interested in promoting theatre as a community activity.

The drama lessons, less restricted by timetabling and run on a more favourable staff/pupil ratio than most heads could contemplate, are important to them, but so is cultivating a habit of going to Hoxton Hall for entertainment, and a profitable interchange with other groups in the community as well as visitors from outside the area (others who used the hall in 1975 included the Buddhist Theatre Group and the Exploding Trouser Company). Hoxton has long been a centre where professional actors who are "resting" can mount showcase productions.

In general, the project members' aim is to replace the disillusionment and apathy they found in their work as individual teachers with the enthusiasm they experienced while working together as amateurs. They are not politically motivated: Terry Goodfellow says categorically that the theatre is of the imagination and should not be tied down to particular causes. On the other hand, they believe Hoxton Hall should be at the centre of the community, and so any matters of local debate should find a platform there. They would regard it as an impertinence to suggest that they could come in and impose their ideas on others. In fact, Margaret Shepherd says that they should be trying to work themselves out of a job: once they have demonstrated that facilities exist, it is hoped that local people will want to run them.

At present the group is far from being short of work. Their own drama experiments, as well as the other activities which they either run or administer, and which vary from shoe-repairing to literacy classes, adult drama group to after-school play club, keep them all thoroughly occupied, including most evenings and many weekends. Paradoxically, this could prove to be a stumbling block: so involved are they with Hoxton Hall, they are in danger of ceasing altogether to have a normal existence in the community.

Dr Buravikhin implies that there is too much slack in the Soviet educational research industry. He calls for a boost to efficiency, pointing out that during the last hundred years labour productivity in industry has increased 1,400 per cent, provision of services—including education—only 120 per cent.

The dissemination of new knowledge obtained by research is now very difficult. Traditional methods are inadequate. Some 100,000 journals now publish 5,000,000 articles a year. In the last 10 years new inventions and discoveries have outnumbered those made in the preceding 2,000 years. In space research alone more than 12,000 new devices and ideas have been produced. All this, says Dr Buravikhin, shows that the content and methods of education must constantly approximate to the dynamics of modern science and industry.

Perhaps the most important difference between the approach to educational research in Russia and in Britain is that we have not made up our minds about what is significant, and our amateur researchers, starting little projects on their own patch, unworried by higher councils, may still find something of value—if not to the wider educational world, then to their own charges and their own schools.

Ostensibly Soviet ideologists have made up their minds about what is important: it is to decide which areas of school life can be safely put under the microscope. Their problem now appears to be to watch that their puritanical clear-sightedness is not corrupted by the dangerous habit of asking youngsters questions.

More power to the teachers

Kenneth Shaw finds that Russian teachers are beginning to challenge the ideologists over the content and methods of educational research

Inside the classroom Soviet teachers are supposed to adhere to prescribed techniques; officially research should be done by qualified staff from the higher institutes, whose policies can be controlled by the Party. Recently, however, experiments on pupil-teacher interaction, the nature of competition and the mechanics of small group interaction, to name only

a few of the areas being examined, have begun to concern Russian ideologists.

Although the findings of this research have not been widely used in practice—and, indeed, this itself has been criticized by state planners, who point to wastage and duplication—Party policy makers fear that the use of the research approach to classroom methods may shift the seat of control and definition of educational aims from the top echelons of the Soviet hierarchy to the working teacher.

Some ideologists are concerned about the scale of the research being done in schools. This is not surprising. The various institutes attached to the Academy of Pedagogical Sciences employ 695 pedagogues and hundreds of assistants. There are 250 departments of psychology and education with 10,000 staff in higher institutes across the country.

Special departments concentrating on new teaching methods have a total staff of 4,000, and there are 30,000 people working on scientific projects to do with education. Some of the classroom research is done by teachers, of whom 2,000 are registered with the academy as part-time correspondents.

Since last November *Uchitel'skaya Gazeta*, the teachers' newspaper, has been debating the criteria of school efficiency. It has raised many voices in witness to a growing uncertainty about what education is all about—even when the Soviet aim is "to create the new Soviet man". E. Volkov, from a school attached to Moscow University, wants to see a return to a consensus on methods of con-

Voice of a nation?

Sally Jenkinson on broadcasting in France

Broadcasting and Democracy in France. By Ruth Thomas. Bradford University Press in Association with Croom Helm. 1975. Pp. 200. £6.00. 0258 97006 5.

A book in English about broadcasting and democracy in France was a promising idea. In Britain, the Annan Committee is investigating broadcasting. In other European countries, such as Germany and Holland (see Professor Holt's points in the introduction), the structures of broadcasting are believed to play an important part in promoting more open and more accountable government. Furthermore, since the election of President Giscard-d'Estaing, the pious noises always heard in minority liberal circles in France, actually seem to be taking the shape of a modest diversification of broadcasting outlets. The majority is cynical. As a *Le Monde* journalist noted recently, it's "Yes to liberalisation on condition that it's not used against us." Will Giscard ultimately prove more prudent than was Louis Napoleon?

Ruth Thomas's book has the advantage of topicality. It has examined a number of published reports and documents, and it has presented the English-speaking reader with some sort of a background to the contemporary debate. Its weakness is that it has no disciplinary background. It tries to cope

with historical, administrative, official and party-political materials, failing to adjust for bias or interest.

It is a useful source book for those with some knowledge, but confusing and difficult for those without. Ironically is Ruth Thomas's virtue and she admits finding it easier to identify what was relevant to broadcasting than what was relevant to democracy (is this problem endemic to European studies departments?). The fundamental weakness of the study follows from the apparently innocuous, or impeccably respectable, assumption that "one of the tests of a healthy liberal democracy is the effectiveness of its broadcasting system". In France there is disagreement over the proper understanding of the word "effective" in this context—effective for what?

Unlike American or British politicians, only a handful among the French "establishment" figures would take this as it is intended. The majority would be mainly from minority parties of centre. The right and left take "effectiveness" to mean the effective control by the government over those who would undermine it—especially over those who might do so through the broadcasting system. In the administration itself, and especially within the ORTF, attitudes are more complex. Even so, accepting that the government broadcasting network is more of a COI than a BBC—to use an analogy—only the naïve

would expect to retain their jobs if they clashed openly with the government's policies, notwithstanding what it says in the Charter. M. Pierre Messier as Prime Minister in 1973 was drawn to comment on the dismissal of the President of the ORTF. He remarked simply "if a minister clashes with a civil servant it is naturally the latter who loses his job".

By a paradox, this study's utility as a special plea for more openness in government is diminished to the extent that it has adopted the vocabulary of the sources that likewise took this position. For it is both incorrect and unhelpful to describe the relations of the French Government with the ORTF, or its staff, as "sinister", "authoritarian", "idiotic", "crude", or "even though incidents have taken place at times they were so described by sober-minded observers".

What analysts of institutions need to know is why the control of the government over French broadcasting has become relatively less effective in recent years. An analysis beginning from this premise, might produce a very interesting conclusion. In short, how much better this study might have been, had it made the functional assumption that in the complex of French institutions the broadcasting system belongs more to the executive side of government, than to the watchdog side.

Eau de Köln...

David Head on West Germany

West Germany: An Introduction. By Günther Kloss. Macmillan £6.95. 333 18645 1. £2.95. 18702 4.

When compared with other recent studies of West Germany, this book stands out principally for the effort which it makes to be as practical an introduction as possible for the serious student. It is concise, yet packs in plenty of detail and offers a generous helping of maps, tables and diagrams. Specialists outside the field of German studies would not find the book superficial. In fact, the sections on the economy and social structure of West Germany are likely to be fully appreciated only by the initiated.

But it is inevitably the germanist with an interest in modern Germany who is intended to benefit most from this survey. This consideration is particularly apparent in the author's deliberate attempt to help this kind of student familiarize himself with the essential terminology, a policy which has led Mr Kloss to use German names and terms throughout. However, even the keenest newcomer to the subject will surely wonder what he stands to gain from repeated references to the "Bundesrepublik" instead of the Federal Republic and to "Köln" instead of Cologne (the German words usually recur in the index). And an initial slip, such as the remark that "slightly fewer workers join Gewerkschaften than in Britain" is surely something that the budding germanist should be warned against.

On the other hand, the absence of "Ruhrgebiet" for "Ruhr district" and the switch from "Kindergarten" to "Kindergartens" does not give cause for concern. The less less equivocal, though we encounter "the Deutscher Gewerkschaftsbund" and "the Christliche Gewerkschaftsbund" in successive sentences and reference to "the Westdeutscher Rundfunk" and "Südwestdeutsche Rundfunk" next to each other in the same list. But at least there is a handy German-English glossary at the back of the book which the reader can turn to when he is puzzled.

This is, then, a basically sound introductory study which is to be recommended for its informative value regarding West Germany today and as an incentive to further study (the bibliography is quite extensive), if not as an example of the use of German in an English context. Judging by the scant awareness of the Federal Republic shown by many sixth form germanists at university selection interviews, there is certainly a place for Mr Kloss's book in school as well as university libraries.

Paperbacks

Rights and privileges

Michael Hurst

The Habsburg Monarchy, 1809-1918. By A. J. P. Taylor (Penguin £2.25. 14 055,041 0) is an attractively presented and unbridled version of the largely rewritten 1947 edition of the book. As a short account of the subject it still remains without effective competitors, although the numerous blemishes make one crave for replacements. There is throughout a startling lack of sensitivity about the different ethnic groups and a poor appreciation of the area during these years. While stylistic flourishes abound, no found approaches, particularly in assessing imperial and royal policy, are sadly in short supply. But above all there is a lack of almost any sense of the wider context of the formerly Habsburg regions. It is bound to find the two-dimensional treatment somewhat soul-searing.

Freedom in Arms: A Selection of Leveller Writings, edited by A. L. Morton (Lawrence and Wishart £1.00. 85315 314 0). Men and women may or may not be made equal and may not be self-evident. There can, however, be no doubt that any literate elitist, egalitarian, or even quietist should be master or mistress of the key writings in the field of "levelling". And what more pertinent than works of the Levellers themselves? The book is a selection of the Levellers' political and social ideas, and is a most interesting and useful introduction to the Levellers.

A. L. Morton has selected 17 leading tracts, ranging from "A Solemn Engagement of the Levellers" to "The Levellers' Declaration of Sentiments".

The Habsburg Monarchy, 1809-1918. By A. J. P. Taylor (Penguin £2.25. 14 055,041 0) is an attractively presented and unbridled version of the largely rewritten 1947 edition of the book. As a short account of the subject it still remains without effective competitors, although the numerous blemishes make one crave for replacements. There is throughout a startling lack of sensitivity about the different ethnic groups and a poor appreciation of the area during these years. While stylistic flourishes abound, no found approaches, particularly in assessing imperial and royal policy, are sadly in short supply. But above all there is a lack of almost any sense of the wider context of the formerly Habsburg regions. It is bound to find the two-dimensional treatment somewhat soul-searing.

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Finally, a word of congratulation: the edition is nearly as pretty as the original—and a bargain for the price.

Among this week's contributors:

Brian Goodey lectures at the Centre for Urban and Regional Studies at Birmingham University. David Head lectures in modern languages at Bath University. Michael Hurst is a fellow in history at St. John's College, Oxford. Sally Jenkinson lectures in political theory and institutions (with parallel reference to France) at the North East London Polytechnic. Donald MacRae is a Professor of sociology at the London School of Economics. Geoffrey Parkison is a probation officer. Martin Southwood is senior lecturer in social anthropology at Manchester University.

Lines and planes

Alan Sherlock on algebra

Modern College Algebra with applications. By Ronald Jamison. Harcourt Brace Jovanovich £6.95. 15 560415 5.

Modern College Algebra and Trigonometry with applications. By Harcourt Brace Jovanovich £7.55. 15 560430 9.

These two books contain identical material apart from the addition of two chapters of trigonometry in the second, my remarks can be taken to refer to both texts. The author claims that the books are the result of nearly 20 years teaching during which he has made a conscientious effort to understand the process by which students learn. The writing is informal and yet precise, and addresses the reader directly—two colours to emphasize key elements and procedures and two categories of problem set offer a wide variety of learning experiences.

The college level of mathematics is difficult to define in this country, so this book ranges through the topics we study between 14 and 18, with an adult vocabulary, an axiomatic approach and yet with a strong cartoon at the beginning of each chapter. As usual, the book starts with Venn diagrams, leads on to types of number and their properties, linear and quadratic equations (including the formula) and inequalities.

Relations and functions follow: $y = ax + c$; finding the turning points of a quadratic algebraically; lines and curves; intersections; exponential and log functions; eventually leading to the use of logs in the base 10 for calculations and problems on the theory of logs (Additional Mathematics level).

This is an excellent introduction to algebra, functions via periodic functions, which culminates in the work on trig functions, the role and use of complex numbers, making the introduction an ordered pair of

numbers in the complex plane. "Points in the complex plane represent complex numbers" (a basic misunderstanding, I feel) and on to De Moivre's Theorem.

The last sections of the book seem a hotch-potch of ideas—algebraic long division, roots of equations, rational functions and their sketches; matrices; diagonalization (Matrix theory began as a game with no apparent application) and strangely, application to codes. A change of scene again brings us to induction, sequences and series (arithmetic and geometric) and hence to the Binomial Theorem (for a positive integer).

The final chapter is about the conics (in cartesian) and includes translation and rotation of the axes (but no matrices!) The "applications" of the title apparently refers to the exercises in each chapter where an attempt has been made to disguise the theoretical problems with a disguise to provide motivation.

These books are disappointing; opportunities to interest pupils, to excite, to extend, to illustrate are lost at every turn for the sake of an assumed treatment. The understanding of many algebraic concepts is made so much easier by the use of geometric illustration and so it seems very unlikely that a book such as this can be successful (unless American pupils learn in a different way).

However, I found the chapter on circular functions interesting and I have every admiration for the excellent work of publisher and printer.

Introductory Linear Algebra with Applications. By Bernard Kolman. Collier Macmillan £8.00. 02 365 950 5.

This is another well produced American text for use at their first or second year university level. The emphasis is on the computational and geometrical aspects of the subject, keeping the abstraction

Virtues of simplicity

Joyce Linfoot

Shape and Number. By R. R. Joy. Books 1-3 £1.45 each. Book 4 £1.95. Macmillan Education.

Books one to three provide a three-year foundation course for O level or GCSE work and book four is arranged to cover four and a half years leaving time for the study of special topics in depth, and for revision. At first sight, the books look attractive and they have the merit of a consistent plan. A child brought up on this series should be confident and happy when asked to find the confidence which comes from finding plainly set out all that is expected to know.

They are also welcome because they demonstrate that many of the topics which have been introduced since 1960 have now been covered, and can be brought into focus with what are left of the old series. It is also more fully realized that manipulation of fractions is not so greatly needed: here, division by

a fraction is postponed until book four when the difficulties are no longer formidable.

Important topics are dealt with a little at a time in one book after another: with this plan it is sometimes hard to link everything up perfectly. Thus, in the definition of the set of integers, the set is said, in book two, to include the positive numbers, whereas in book four these are referred to as the natural numbers, a difference which might puzzle a philosopher and perhaps an intelligent child.

Considering that (as is repeatedly stated) the books are intended to be used by children of average or above-average ability, the amount accomplished by the end of book four is in many topics disturbingly slight. It becomes more and more apparent that the simplicity of the exposition has been gained by jettisoning almost entirely the ideas of proof.

This, of course, shows most clearly in the geometry. Even with

a theorem as simple as the one about the sum of the angles of a convex polygon, the author prefers to prove it by a special case (the regular polygon) rather than prove the general result. Pythagoras' theorem itself is given in book four as a rule; on searching the preceding books one finds only Perigal's dissection, which, it is said, the reader "can easily see that the theorem is true".

The author, incidentally, owes an apology to Henry Perigal, who was not a Greek, but an Englishman of Huguenot descent, a remarkable man who lived through almost the whole of the nineteenth century, and whose dissection of the 1830. It was engraved on his tombstone in Wennington churchyard: the inscription also contained the words:

"One of those unwelcome preachers Who tirelessly re-teach their Teachers."

Metrical measuring

Area, Weight and Volume. By Alan Bell, E. R. Rothwell Hughes and Joseph Rogers. Nelson £3.50. 17 423061 3.

Teaching Metric Awareness. By V. Mary Kirtley. Heinemann £2.70. 8016 2811 3. The Use of SI Units in the Early Middle Years of Schooling. The Association for Science Education 2pp. 902786 18 0.

How do children between the ages of seven and 11 develop their conceptions of area, weight and volume?

A School Council research project investigated the problem, and a text now makes available some of the findings, and offers valuable guidance to teachers.

The work of Piaget is naturally prominent; there is sensible emphasis on the varying capabilities of the individual child, considerations of such different functions as imagination, logical thinking and analysis, and an abundance of down-to-earth, practical suggestions.

Measurement right across the board now appears to be a problem in the United States. To help child-

ren (and, apparently, adults too) accept metrication, Mr Kirtley provides a standard collection of examples and exercises.

We may be somewhat past this stage in Britain, but there is still a welcome for a second booklet on SI units from the Association for Science Education. An earlier publication was specifically for use in school science; now there is advice for teachers of younger pupils, and those not necessarily following academic courses at the secondary stage.

F.W.K.

Children's literature

Witches, beasts and sorcerers

Lesley Lancaster

The Mystical Beast. By Alison Farthing. Chilton and Windus £2.25. 7011 5082 3.

Witch Fever. By Leif Roper. Pelham Books £2.25. 7207 0901 6.

The Flying Sorcerer. By Huxley Wynne Jones. Heinemann £2.60. 434 94460 2.

Witches, complete with pointed hats, brooms, cats and cackles, have been a part of story-telling since the very beginnings of that art in its written form. Their ability to transform enemies into loads and, fairly godmother-like, to ensure that everything turns out right for those whom they favour, invests them with a reassuring capacity to reorder and control human activity. The witch figure also provides a focus on to which young children—aware of the immensity of the concrete world but by no means yet certain of their place within it—can project their archetypal fears.

Alison Farthing's scarily vague Lavinia is a most unlikely magical character. She is addicted to hyacinth-scented hair-spray and gets very worried when she has to give up her Saturday hair-washing job in order to search for the Mystical Beast, who lives on the other side, where it is never nice and ordinary and tidy, just horrible spells and one happening after another.

But, with the assistance of two friends (one of them an eminently sensible but rather bossy girl) she masters the evil intentions of two bejewelled and braided witches and their minion—a fabulous version of Ulfar Hecp.

Lavinia defeats the noxious ranks of witches and warlocks at their annual "glumming"—a ritual

strengthening of spells—and finally rescues the Mystical Beast in an effective finale which is an unlikely amalgam of the hair-raising and the dream-like. The world of *The Mystical Beast*, where there is sunshine despite the absence of a sun, exists very convincingly somewhere between stark reality and the spidery illustrations are suitably otherworldly.

Fantasy and light-heartedness are never allowed to relieve the gloom of *Witch Fever*, an excellently related but grim tale of persecution, set in a country which is both anonymous and historically elusive. A boy watches his own mother, suspected of being a witch, burn to death. He then recounts his horrific experiences to a sympathetic old man who helps him in come to terms with his trauma. But, when in due turn, the old man is himself arrested and charged with sorcery, the story reverts to the lower depths and even adults are unlikely to remain undisturbed by a dismal chronicle which can only be responsibly recommended to older children and teenagers.

The author has, however, succeeded in demonstrating how and why it is that periodically, during periods of communal insecurity, a society is compelled to seek out and persecute scapegoats. And she brings the reader face to face with a very pertinent dilemma—which is the more menacing force, that of the unknown one or the tortured?

The Flying Sorcerer is written in an old-fashioned style, much influenced by *Boy's Own*. A science teacher at a boys' boarding school (Lavinia's time-adjuster, no less, and then allows his more adventurous pupil to plunge backwards to prehistory and, briefly, forwards to scifi. Like the mechanism itself, the narrative whizzes unpredictably from sequence to sequence, leaving the reader muddled and bemused. It hardly needs saying that none of this is nearly as compelling as old-fashioned witchcraft.

Machine intelligence

F. W. Kellaway on computers

An Introduction to the Uses of Computers. By M. Laver. Cambridge University Press £2.95. 0 521 29035 X.

Electronic Computers. By S. H. Hollingdale and G. C. Tootill. Penguin £1.00. 14 02 0524 1.

Computers and Society. By S. Rothman and C. Mesnager. Science, Research, Associates £7.15. 574 21055 5.

All three of these excellent books, make the points, in one way or another, that the computer is an instrument whose basic principles are readily understandable, and that it performs only such operations as it is programmed to do, but cannot act independently of man. All three are completely admirable in the way they fulfil their objectives.

Mr Laver's book, while forming a valuable addition to the Cambridge computer text series, is intended for non-specialists who wish to know enough about computers to recognize and utilize their applications in their own work. This illustrates of uses in science, engineering or medicine are paralleled by others in, for example, typesetting, legal processes, industry and commerce. Data processing, management information and control, automation of continuous manufacturing, and weather forecasting are a sample of the featured themes.

Before this stage, however, come definitions of terminology which

really do explain the technical language (or jargon) which is usually taken for granted in so much writing about computers. There need no longer be any mystery about bits, floating point, magnetic ink character recognition, data-retrieval, flow charts, timesharing, and so on.

So we are led, competently and authoritatively, to an understanding of how a computer works, the input and output processes, analysis and programming, and several thoughtful sections on the limitations of a computer, machine intelligence, and on social questions such as the invasion of privacy. Bibliographies and index are praiseworthy also.

The Pelican by Dr Hollingdale and Mr Tootill first appeared in 1965. A new edition brings the story up to date, and the comprehensive work retains its place among the very best surveys of the subject. History and practice are mingled, and the book is especially well treated, and commensurate about the place of computers, now and in the future, prevails.

Commonsense is a hallmark, too, of an American text which is particularly concerned about the social implications as well as the technology of the computer. Here again all the facets of hardware and software are explored, while such matters as health care, applications in education, the control of (and by) government, and—above all—privacy and individuality, are treated in depth.

Trains and boats and planes

Donald MacRae

The Englishman's Holiday. By J. A. R. Pimlott. The Harvester Press £4.50. 0 85527 229 5.

Why reprint a little-known book by a dead civil servant after 30 years? The answer is clear. The subject is important and neglected; nothing very serious save in the field of transport history has appeared since Pimlott's book, which is both humane and amusing—a pleasant holiday book in itself. Students of social history ought to be able to find this volume in school libraries, and to find in it something about themselves.

Of course it is, in a way, "amateur" history. The earlier chapters on the seventeenth and eighteenth centuries are a little thin, pleasant, factual but dominated too much by the ghosts of Beau Nash and Jane Austen—always a bad influence on English historians. But with steam boats and railways the history improves. Today it would be more quantitative, and the better

for it. Who, earning what, in what numbers, and whether are questions which should be answered more directly.

But Pimlott did not think his book more than a start of the study of institutionalized general leisure. He even listed seven questions for further research—an omniscient son-them has received serious professional attention. The more important—the other side, of Marx's famous account of the factory worker's day—is still unstudied by developmental or sociological. It is "the half holiday, the weekend, and more recently the Saturday holiday, as a result of the spread of the five-day week". But this is a theme for Durkheimian sociologists, even more than for Marxists.

And if Pimlott does not give us enough figures, he does provide some essential administrative history, and here he is to amateur. This is the only starting point for understanding how we come to have holidays with pay. Such things are not given: they are made and he tells us how. Again his concern to use survey data is still remarkable and highly professional. He is strong, too, at the human level, par-

ticularly in the absurd stories of how winter in the sea, air—mountain or sea—again—can be supposed to give the holiday the legitimization of being part of the quest for health. But he is weak (or neglectful) on the relation of holidays and sex, nor does he list this for future research despite its rich promise of comedy and understanding.

He was, essentially, a liberal socialist of the Hammonds, Hobson, Hobhouse, Tawney, Gillsberg kind. Thus he bothered too much about Pimlott's worry: what would the tradition of leisure be like in 1970? It is an impertinent question. The concern behind it was real: without it we would be a worse nation, and we would not have this nice, and not too solemn book. I wonder if Pimlott, who was one of the founders of the C.A.A., saw the polytechnics as a kind of answer to the question of the use of leisure by the untutored masses? Alas, no.

Finally, a word of congratulation: the edition is nearly as pretty as the original—and a bargain for the price.

World enough and time

Brian Goodey

The Sociology of Leisure. By Stanley Parker. Allen and Unwin £5.50. 04 3010768. £2.95. 301075 X.

On the day that Parker's book arrived on my desk, there also appeared the announcement that for a similar price I could obtain an American volume entitled *Research Camping and Environmental Education* which contained 26 papers on this theme. Research into leisure and recreation has boomed at a rate which may have exceeded the growth rate of its subject, and it is

often difficult for the teacher of an introductory course to find a text which raises the full range of issues which the non-specialist student should consider.

This author has wisely avoided a synoptic approach to the mass of available research studies and has, instead, illustrated a series of issues and topic-based chapters with occasional examples which the informed reader can supplement. The study, which raises theoretical questions from within sociology but fails to pursue them with any determinate, falls into three parts: the Cultural Context of Leisure, Leisure and other Spheres of Life, and Leisure Planning and Policies.

Each reader will question the balance of material, but a whole chapter on Leisure and Religion, which the non-specialist student may seem excessive when transpiration falls to merit even a side-land. The progress of legislation with regard to leisure with special and land-use matters is hardly touched upon, covered. A guide to appropriate reading, research reports, and legislation would have ensured the use, book by students. Nevertheless, the survey of current knowledge and views of leisure deserves wide adoption as an introduction to the

Language development across the curriculum

by Maurice Oliphant

Scope Stage 2: Homes Work Cards; Travel Work Cards; Water Work Cards. By Josie Levine. Longman Group Ltd, Longman House, Burnt Mill, Harlow, Essex CM20 2JE. £1.25 per set.

These work cards complete Scope Stage 2 Language Development Course which is designed thematically to provide for second language learners with an elementary knowledge of spoken English and a minimal competence in reading and writing, also for speakers of dialects of English or native speakers who have learning problems because of language difficulties.

All the materials are aimed at the middle school age range and are intended to help teachers to develop the use of English as a tool for learning, thinking and communicating.

The work cards cut across many subject areas, including science, history, geography, mathematics, biology and social studies, giving practical weight to the notion that language development should be the responsibility of all teachers in a school.

The cards are written at three levels: pink cards are the simplest; the blue ones more difficult and the yellow cards more difficult again. The less able child can feel he is playing his part in a group venture and will also hear and see more complex work during the workshop sessions, when it is suggested that children explain, discuss and consolidate the work completed on a theme.

The more able child working on the yellow cards will find greater demands made upon him in terms of complexity and amount of work. Although new sentence types are not usually introduced, the cards provide teachers with clear models from which to prepare further cards which can incorporate particular interests of the children or topics emerging naturally from discussion.

Much of the work arises from real situations within the expert-

ence of the child such as making a survey of the area around the school, drawing plans of their houses or flats or cooking baked herring which have been bought during a visit to the local fishmongers. The authors have given clear guidelines as to what techniques should be used to structure the language which emerges from the activity.

They appear to have asked themselves: "What function does the language perform in a particular situation?" and not, as in many other courses: "How can this structure be imposed on the subject matter?"

The layout of the cards is simple and attractive. There is a variety of reproduced photographs, clear illustrations and models to help children with their own diagrams. Reference material is suggested, although for children who find reference difficult there is enough information on the cards for the topic work. This is helpful: in the past topic work has been hampered by insufficient or over-complex reference material.

An interesting feature is that the cards encourage activities to be carried out in various situations: working alone, in pairs, in a group, in a group with the teacher as leader or consultant, or in the more conventional arrangement with the class addressed by the teacher.

It is important to see the cards as a component of the course. Although they incorporate many individually interesting areas of study they are most effectively used by following the systematic approach in the teacher's book. This requires substantial preparation before any topic is tackled or children could not attempt certain activities or, if they did, they would not complete them satisfactorily.

For teachers attempting to deal with language acquisition and language difficulties in a multi-racial classroom, these work cards provide both positive guidance and stimulating material.

Sports arena

The Sport on Screen Association, which has been the subject of many discussions since the Videopoint Festival at Milton Keynes, is now in existence. It will be supported by the Milton Keynes Development Corporation, who are looking into the possibility of establishing a Sport and Film Museum.

The association will aim to act as a support group for Videopoint, the British International Sport Film and TV Festival; produce a catalogue and regular newsletter; organise seminars and lectures; be a comprehensive information source on visual media material on the subject of sport and act as contact organization between makers, users, sponsors and similar organizations abroad.

Information from Mr Rowell at Videopoint Office, Watlington Tower, Milton Keynes.

Sums for shoppers

A jar of hand cream costs 30p for 10 fl oz; another brand 35p for 400 ml; which is the better value? Such sums could be an important part of the mathematics lesson. But for teachers and pupils in a consumer education lesson who want to gloss over the arithmetic and get to some other point, a special pocket calculator is now available. Developed by the British Standards Institution with W. H. Smith, the Best Buy Guide enables shoppers to compare the price of products measured by weight and volume.

Using the introductory problem as an example, the calculator shows the cheapest buy the shopper aligns 30p on the slide against 10 on the scale marked fluid ounces. He will then see the answer in pence a litre in the answer window. To find the unit price for the other product the shopper will have to slide the pence scale to the right, indicate cheaper to the right and dearer to the left.

The guide is available from all branches of W. H. Smith for 29p.

Today's topics



A topic for discussion from the eighth and ninth editions of *Clearway*, a magazine published by the Inter-School Christian Fellowship, for use during the autumn term is now available from the Fellowship and costs 55p. The three magazines are planned around fourteen separate topics, each introduced by a story, Bible passage and supporting material together with a discussion outline or "talkabout". *Clearway* 9 contains Christmas holiday material. The Inter-School Christian Fellowship, Scripture Union, 47 Marybone Lane, London W1M 6AX.

A symposium and exhibition on learning aids laboratories in use will be held at the University of Sheffield on September 22.

Organized by the educational techniques subject group of the Chemical Society it will look at the development, organization and use of resource centres by students and lecturers in university and polytechnic chemistry departments. Details from: Dr J. F. Gibson, The Chemical Society, Burlington House, London W1V 0BN.



Pots prehistoric and present

by Jack Rosenberg

Discovering Pottery Sound filmstrip set Educational Audio Visual Inc, Butterley Street, Leeds LS10 1AX. £11.70.

This set consists of two filmstrips in colour, a double-sided tape and teachers' notes which include the complete text of the narration, a glossary and a short bibliography. It was produced in the United States apparently for high school students and has an American narrator.

Part one, which runs for about 11 minutes, deals with the three hand building techniques of pinch, coil and slab and is illustrated by 88 frames. Part two traces the history of pottery from prehistoric times to the present day and takes over 18 minutes. It has 138 illustrations.

The narration, accompanied by sound effects and bursts of music, is presented in a clear and simple way, the attention of new pupils, but the frames are changed at such a speed that a run-through can have little more than an interest in the subject.

With quick reflexes and nimble fingers it is possible to stop the tape without cutting off the speaker in mid-sentence so as to extend the viewing time of individual pictures. This is particularly necessary in the

history section where frequently only half-a-dozen words separate the frames. Part one would have to be reshown without the sound but with comments by the teacher to enable students to grasp the technical details.

As this history covers 5,000 years and about 15 countries, it is not possible to give much space to the pottery of any one culture, although China naturally has the lion's share. It seems strange, however, that ancient Greek pottery has more than twice as many illustrations as the whole of contemporary ceramics which here consists largely of work by painters such as Picasso, Miro and Lichtenstein, rather than by potters.

This shows the basic weakness of the history section—an emphasis on decoration rather than form. Perhaps this was considered necessary to hold the interest of children, but if so, much more space should have been given to contemporary work as present day art and craft in any medium is generally of more interest to the young than that of the past.

On the whole, except for teachers with little knowledge of the subject, it would be better to assemble a collection of slides to illustrate the history of ceramics, and to demonstrate personally the various techniques. With ever dwindling funds, such sound filmstrips as this must be considered a luxury.

Stories for busy people

by Barbara Rigby

BBC Records and Tapes: Chigley and Trumpton REC 234 Mono; MRMC 044 cassette The Tale of a Donkey's Tail and other stories REC 232 stereo Littlefence; stories from Jackanory REC 229 stereo

The growing number of stories on tape and record provide teachers and parents with ready-made material allowing valuable opportunities for the repetition beloved by children but which bore many adults. The BBC has issued three records/cassettes derived from programmes for younger children which might be useful as supplementary listening material. Although the records are reviewed here, the cassettes would be preferable for use with young children. Tiny children can use a cassette player unaided whereas a record player is difficult for them.

The first record derives from the puppet series *Camberwick Green* and *Chigley* for under-fives. It is not really a story record but rather a collection of narrative songs about the various inhabitants of the village. The songs are pleasantly sung by Brian Cant, a firm favourite with young viewers, but with scarcely a memorable line on either side. Unless one knows some tiny

devotees of the programmes, this record has little to recommend it. The Tale of a Donkey's Tail is a mixed bag of stories from "Play School" told by several of the familiar presenters. There are 12 short stories including familiar favourites such as "The Three Bears" and "The Fox and the Crow". Others have themes which will interest young children: animals, lost toys, leaving to whistle and so on. The stories are clearly told but seem to lack any real vitality, essential if they are to capture and hold the attention of the very young.

The last record, aimed at five to eight-year-olds, has stories from a popular "Jackanory" series about the adventures of an engaging cowboy called Littlefence. There are only two stories on each side, but this allows them to be developed to a climax and enables children to be climax absorbed in the life of a boy called John Grant. The author, these stories have a liveliness and style which distinguish them from the other records.

Stories on records and tapes are not substitutes for a friendly adult telling a story but they can be a useful extra if chosen with care. It is rather a pity that the BBC which has done so much to keep the art of storytelling alive, should issue such dull material.

EXTRA EdTech '76

At: Holland Park School, Airle Gardens, London, W8. August 24-26 10am-6pm (4pm, Thursday)

There will be over seventy stands at EdTech '76 including a display by the Department of Industry and a Free Materials stand. There will also be a showing of prize winning films from the 1976 BISFA Festival.

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Preview

A look at some new products which will be on show at EdTech

E. J. Arnold and Son Ltd, Butterley Street, Leeds LS10 1AX. A representative range from E. J. Arnold's equipment and published materials will be on show. New items include an audio reading programme for middle and secondary schools, which actively engages the student in aspects of listening, reading and writing. A new storage system for overhead projector transparencies, stencils, slides, cassettes and worksheets will also be shown.

The Balance Consultancy, Avon Court, Castle Street, Trowbridge, Wilt. The Thor balance, described by the company as a "new low-cost, high performance electronic balance for schools", will be given pride of place.

F.W.O. Bauch Ltd, 49 Theobald Street, Boreham Wood, Herts. This company will be exhibiting a new audio-visual system which gives immediate access to any of six colour transparencies arranged on an A6-size microfiche. The system can be operated manually or automatically.

Blundell Hurling Ltd, Lynch Lane, Weymouth, Dorset. Among their range of drawing materials this company will show the new Paraboard and combined drawing board and tee square, a drawing unit has a transparent tee square which slides in an alloy channel section along the edge of the plastic coated drawing board.

Bostik Ltd, Education Department, Ulverscroft Road, Leicester. This firm has a wide range of adhesives for sticking almost any material. There are simple paper glues and pastes, adhesives for craft work with textiles, leather, metal, pottery, wood, china and glass.



Some new products which will be on show at EdTech. Top left to right: illustrations from Diana Wylie's filmstrip/slide set, "New Life for Old Buildings", a unit in the company's "Environment" series; OEM's Commodore II copier; Hammett's Syllabus 4000 projector; a whiteboard from Magi; a Philips video camera. Below left to right: the Marlab dismountable drawing plate 4279; Mag-Discs, Mag-Add and Mag-Spell, magnetic teaching aids from Marker Board Supplies; and the model SM62 microphone from Shure.

for sale on this stand. BBC Publications will be showing materials which accompany educational television and radio series.

BBG Engineers Ltd, Farley Hill, Luton, Bedfordshire LU1 5RP. BBG, manufacturers of optical filters, photographic accessories and equipment, will be giving particular prominence to their new slide-master storage system. This uses special loose-leaf files, each storing 180 slides, and the portable Slidemaster cabinet with light box.

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Buckley Displays Ltd, 32 Vernon Building, Westbourne Street, High Wycombe, Buckinghamshire. Among other display systems, Buckley will be showing a new item this year, the Buckboard Build Frames. These are made in two portable chrome plated steel sections in ladder form and can be joined.

C. Z. Scientific Instruments Ltd, PO Box 43, 2 Elstree Way, Boreham Wood, Herts WD6 1NB. The United Kingdom Importers of Elmo equipment C. Z. Scientific instruments, will be showing a new 16mm channel loading projector, two new super 8 sound projectors and two new super 8 sound cameras. They will also exhibit Kindor-mann's Portable Daylight Projector.

Digital Equipment Co Ltd, Fountain House, The Butts, Coventry. This company will show their very new multi-user 11V03 time-sharing computer system which enables up to four people to use the computer simultaneously, using the programming languages Basic and Fortran.

ESI Nuclear, Klemfem House, Holmerdale Road, Reigate, Surrey. This company will be exhibiting items from its large range of science equipment. New pieces of equipment will include a universal timer and a stroboscope.

Forlgraph Division of Oref Ltd, Oref House, Stephen Street, London, W1A 1EA. The Milliken range of pre-prepared colour transparencies and spirit masters for use on overhead projectors and spirit duplicators will be on display on this stand together with the Forlgraph which will laminate, dry-mount or cloth back materials.

R. W. Friedel & Co Ltd, 6 Frogmore Road, Hemel Hempstead, Hertfordshire. Friedel make several types of

language laboratory which fall into two categories: those for which all the tape-decks are in a cabinet and those for which the tape decks are within the booths. They hope to exhibit a new remote digital counter which will help students to locate exact places in the tapes when using booths without decks.

Mary Glasgow Publications Ltd, 140 Kensington Church St, London W8. This firm's well-known range of audio products will be on show also some visual equipment. There will be machines for dictation, sound recording and audio typing training as well as remote control television.

Hanmer (UK) Ltd, Faraday Road, Boreham, Swindon, Wilt. This company will be exhibiting slide projectors, a new language laboratory using pre-recorded tape and a new range of headsets including induction loop set which can be used when pupils have to move around, for example, in physical education classes or outside.

Eds for Education Ltd, 87a Trowbridge Road, Bradford-on-Avon, Wiltshire BA15 1EE. Among several new items on this stand will be the Life range of overhead transparency accessories for demonstrating magnetic fields associated with a single conductor, a single and multiple-turn coil and a solenoid. Another Life item is the Ohm Electro-scope with which the company's standard electrostatics experiments can be undertaken.

Gould Advance Ltd, Raynham Rd, Bishop's Cleeve, Herts. This company will be showing a new 25-watt switching mode power supply, believed to be the smallest and lightest of its type. The unit can be mounted on any standard printed circuit card and measures approximately 160x88x33mm. Also on show will be a range of bench and rack mounting.

Gratnell's, 256 Church Rd, London E10 7JQ. This company will be exhibiting a storage system for fitting out school laboratories and for audio-visual equipment. It is made up of trolleys and underbench units made of white

square tube frames into which adjustable trays, baskets and shelving can be placed.

Grundig International Ltd, Newlands Park, London, SE25. This firm's well-known range of audio products will be on show also some visual equipment. There will be machines for dictation, sound recording and audio typing training as well as remote control television.

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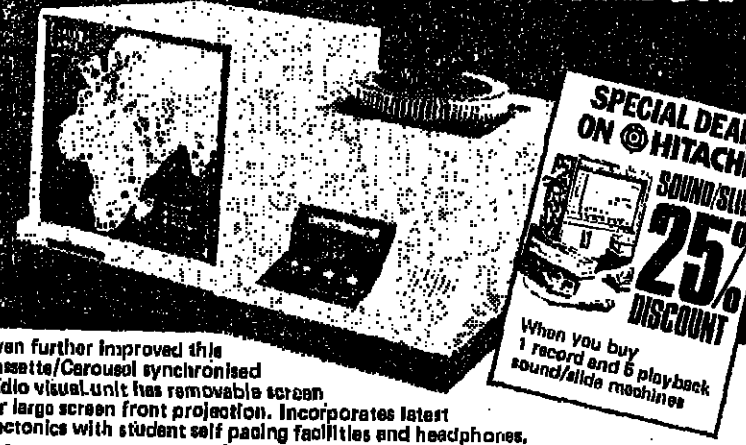
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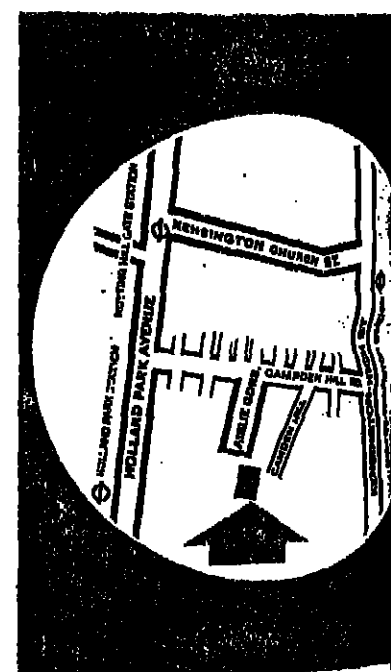
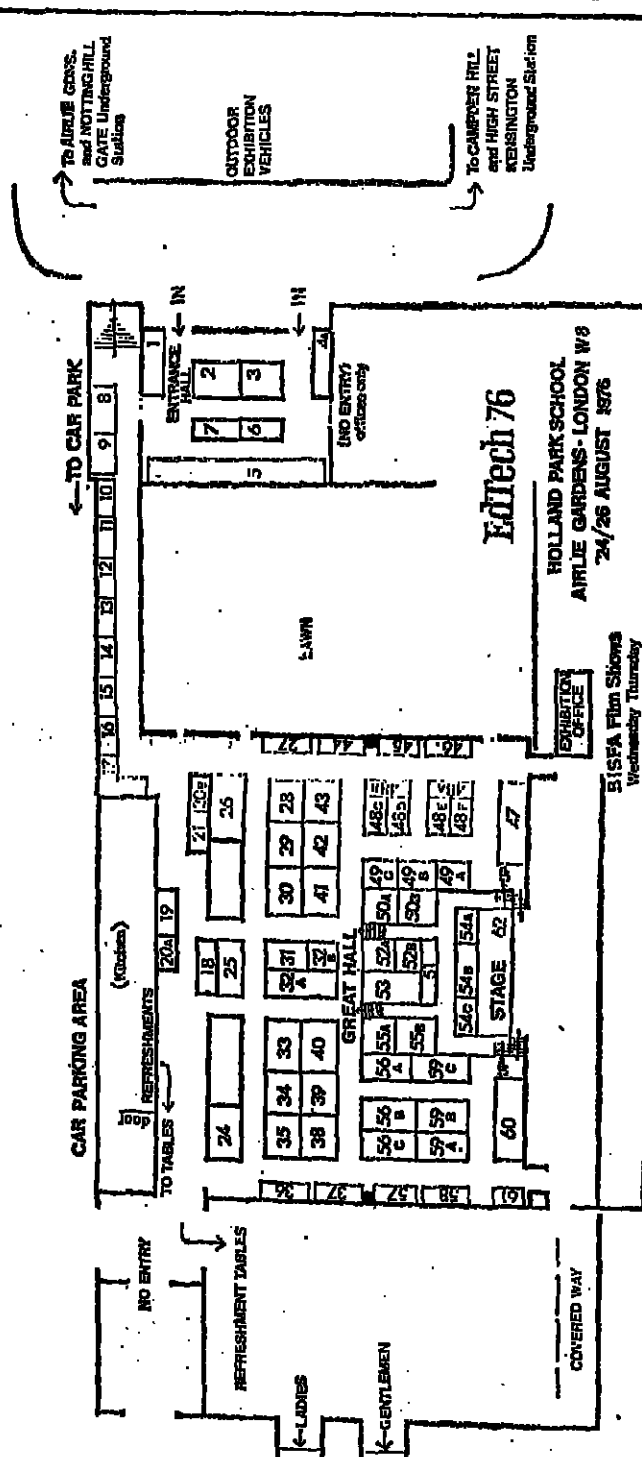
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A good example of this is the remedial mathematics programme introduced two years ago at San Diego State University. This divides a course of intermediate algebra into 18 parts, and uses a computer to administer tests to students. It is coupled with a study guide and some individual tutoring by fellow students, and aims to bring students weak in mathematics up to the general level of their peers.

Students have to show they can manage each unit before passing on to the next, and they receive the study guide for the next unit as a reward for passing the previous test. Mastery of each unit is set at 90 per cent, with a minimum of 70 per cent correct answers.

A computer sets the tests for each unit. Some 3,000 questions were written and fed in, and the computer can set a different, though equivalent, test for each student if necessary. No other expensive audio-visual equipment is required, and

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Not a substitute teacher

Michael Binyon, our North American correspondent, on computers

No country has done more to develop computers or made such widespread use of them than the United States. Yet in one vast and vital field—education—the computer has not yet taken over, and it is doubtful whether it ever will.

Computers, of course, are used in every branch of education as ancillaries: book-keeping, library cataloguing, accounting, even the registration and documentation of new students at universities, but teaching is still a strictly human function.

Nevertheless more and more computers are being used as teaching aids, and have done much to speed and assist the educational process. Their use, because of their cost and complexity, is generally confined to the higher stages of education, but a number of school systems in America have computer terminals, and courses have been started for teachers in some areas on how computers and calculators can be used in primary and secondary schools.

The academic use of computers falls into three broad categories: to encourage the individualization of learning; to store information for use as an advisory service; and to perform the general computation and calculation functions needed by almost every scientific discipline. Individualized learning is increasingly popular in higher education, as it enables students to go at their own pace, moving on to the next stage in a syllabus when they are ready for it, but neither by the clock nor by the pace of fellow students. Computers have been used in two ways.

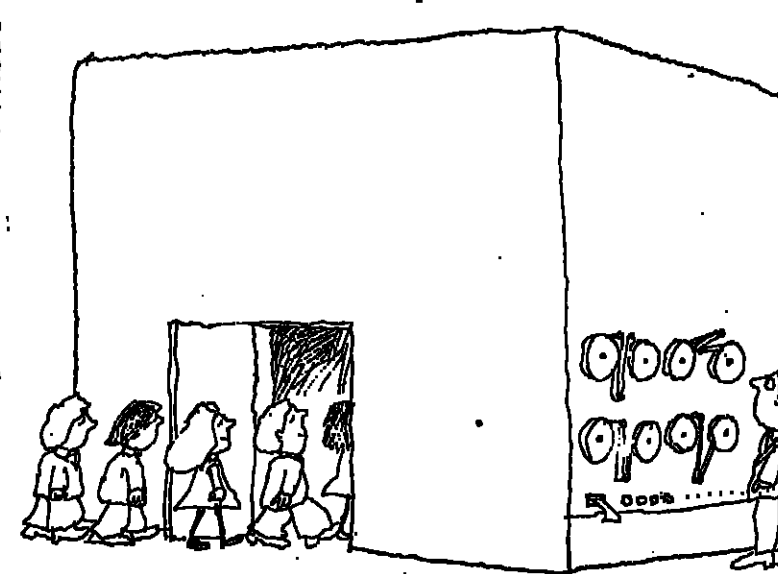
The first, known as computer-assisted instruction, depends on elaborate programmes being fed into computers, and students actually being taught by them. This was found wholly uneconomic and tiresome for both teachers and pupils.

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San Diego has found it can handle between 90 and 100 students an hour in two standard classrooms.

Students take the tests whenever they feel prepared for them. Reports are allowed if necessary. Other colleges and universities in the California State system use the test bank.

Ultimately San Diego wants to match the course objectives with individual students' educational goals, individualizing the content as well as the pace of the course. Content would then depend on a student's needs. Somebody majoring in chemistry could be given more work with logarithms, for example, while psychology majors might need only the algebra necessary for statistics.

The scheme began in summer, 1974, and the initial results were rather gratifying. Students did better on the group final than their counterparts in the traditional classes, and 62 per cent said they preferred the module system. The university is now individualizing sections of other remedial courses—algebra based on a computer—in algebra and trigonometry.

But it is not only in mathematics that computers are helping those needing remedial instruction. At San Antonio College in Texas students weak in English are learning to write clear, grammatical sentences with the assistance of a computer. A multi-media laboratory supplements the classroom work in the remedial course.

The students use typewriters and visual display terminals and do drills on the basic concepts of sentence structure and usage. As they progress, colour slides, narrated by audio tapes, flash on the screen.

At Duke University in North Carolina, the economics department is using computers to individualize instruction in the large impersonal introductory course. Similar programmes are now being tried in colleges and universities all over America.

The second main use of computers is the storage of information, an interesting project in the State of Oregon. The computerized career counselling service. A high school student can quickly find out careers available to him.

The computer will ask questions about scholastic aptitude, personality attributes and interests. It might then say, "how much can you lift over 100 pounds?"

One student, who hoped to go into the forestry service, but had asthma, replied that he could not do exercises, and therefore could not lift that much. When he had completed the questions, including whether he liked working with people or with information, how much education he was willing to pursue and where he wanted to live, the computer printed out a list of occupations that matched his skills. Forestry was not on the list because of the boy's physical limitations.

dozens of social agencies also use computers.

Unlike national job surveys, the Oregon system can tell students and job seekers exactly what is happening near them, and give them names and phone numbers of people working in the fields they might choose. Iowa, Washington and Tennessee have begun to develop similar programmes, and the United States Labour Department recently granted eight more states \$300,000 a year to create similar systems.

Schools and agencies using the Oregon system pay a total of \$230,000 a year, or slightly less than \$2 a person for updated computer tapes that are continuously reviewed by a team of researchers.

Finally, of course, there is the obvious use of computers for computation and calculations. Nowadays every major American university has at least one computer, and research in most science faculties would be virtually impossible without it. The Massachusetts Institute of Technology and Dartmouth College are probably the two campuses that have invested most in computers.

Dartmouth probably makes more use of computers than any other university in America. It has a \$2m computer, with terminals in every department and every new student, no matter what his discipline, is given a computer number on entry.

Practically all faculties make use of it. The social sciences have the largest programmes called IMPRESS (Interdisciplinary Machine Processing for Research in Social Sciences). Science students generally write their own programmes, depending on their study. They could, for instance, explore the effects of gravity on satellite orbiting, plotting the orbits and watching the readout on the computer in a way that is more vivid and immediate than any theoretical calculation.

In the humanities, the computer has been used by the Greek, Latin, Spanish, French, German and Russian departments. It has been used for a study of French adverbs for vocabulary and linguistic work. The philosophy department has a programme called BERTIE (after Bertrand Russell) to develop practical problems in logic.

Even the music department uses a computer—a separate one—for composition. The machine emits four or five different sounds, then silence, and the student uses them to generate compositions, which he feeds in and can then hear played back immediately.

Every student and teacher at Dartmouth is allowed unlimited access to a terminal. The amount of time he can spend on the computer and the disc storage space is limited, but flexible.

Computer education of this kind is popular with students, especially as it is often presented in the form of games. Even school children seem to find it fun, and more and more schools are now linked to computer networks. But even the most ardent advocates admit that the machines will never replace the teachers, however cheap the terminals become. New York City schools are now using computers to help students with their reading and writing. Most educationists hope computers will eventually be a major educational tool, not a substitute dehumanized teacher.

Films abused and used

by R. C. R. Bertram

Film is underused in Britain compared with many other countries, such as the United States, Norway or Australia. The standard explanation is the shortage of money which means too few projectors and poor black-out, but this explanation is superficial: there are, for instance, many projectors sitting, hardly used, in cupboards. The real reasons are, first, the profound lack of knowledge about the availability and content of films; second the difficulty of getting the film to the classroom, along with projector, screen and black-out; third, and very important, the reluctance of teachers to use film.

Teaching has traditionally been a private activity between adults and children, and often the teacher likes to be solely responsible for his pupils' knowledge. A film provides a means and a way of learning a topic which may be at variance with the teacher's point of view. But ideally the key word in the use of films is extension. As an extension of knowledge, they provide an alternative way of imparting knowledge, not alternative facts, blackboards or words. The facts can be expressed and illustrated simultaneously. As an extension of time the ordinary time scale can be altered to suit the subject matter.

Time-lapse techniques, in which a single frame is taken at intervals, can be used to speed up extremely

slow processes, for example, the opening of a flower can be clearly seen. Instead of merely waiting for the beginning, and, several days later, the end, pupils watch the whole process. Slow motion techniques allow extremely rapid movements to be observed. The wing movements of bees or humming birds can be slowed down to allow, for example, the movement to be understood.

Finally, extension can be achieved in terms of magnification. Thus minute creatures such as amoebae can easily be seen to grow, divide and move on the screen. Further, moving diagram techniques can be used to illustrate concepts which are difficult to explain effectively in words. The complicated ideas of ions moving in and out of nerves during the passage of a nerve impulse can be shown far more effectively on film than on any series of diagrams or a chart or blackboard. If the advantages of film are contained in the phrase "extension of learning", how should a film actually be used? The answer to this question is complicated. It is vital that the teacher should remain in control of the learning; the film is not a substitute for the teacher, but a tool to be used as an introduction, setting the scene powerfully by bringing together examples, in most cases, thus are better used at the end of a topic, completing the process

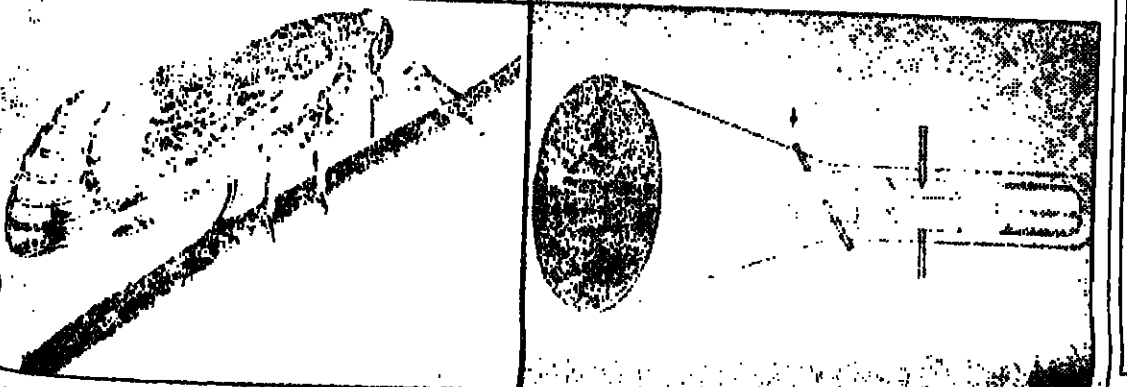
of assimilation, often by summarizing the information.

The pupil is, by this stage, in a position to be critical. He can look at the film and make use of those pieces of information which tie in with his previous knowledge and he can disregard which always take up a part of a film commentary.

Finally, films are invaluable for revision. Often revision just means going through the same topic again, in the same way, only faster: an extremely boring exercise. But a film, even if it has been seen before, will remind the pupil of the topic, and the teacher getting to know the films that are available and hence using them at the appropriate time. It is normal practice for a teacher to know what textbooks and reference books are suitable and a similar knowledge of film content could be achieved if a school or teachers' centre maintained, as part of its available resources, a list of the films and audio-visual aids, with a brief review and statement of their suitability for a particular age group.

Certain subjects, such as health education, have used films consistently for many years. It is a habit that many other subjects could well emulate.

R. C. R. Bertram is head of biology at the Netherhall School, Cambridge, and an adviser to Boulton-Luker Films Ltd.



Left: from "Insect Life Cycle: The Periodic Cicada". Right: from "Introduction to the Cathode Ray Tube".

Social activities

Carl Lora and Michael Weiss on a new Schools Council project

The activities will encourage the development of oral communication skills and how can such activities be included in already overcrowded timetables. They will be carried out experimentally by a Schools Council project through the use of audio-visual aids.

Over a period of two years we have been working with groups of pupils making tape-slide programmes, films and television programmes. They will have carried out experimentally by a Schools Council project through the use of audio-visual aids.

Observation showed that when pupils worked in groups towards a common aim, they were very motivated and pupils had to cope with pressures within the group, and the value placed upon the work was greater for the pupils than when they worked individually.

Further observation suggested that where project work was carried out in the classroom, the pupils' understanding of the subject was deepened and the process and the end product were more meaningful.

A dozen or more north-east schools. Teachers and pupils have been selected to give a wide range of subjects, and pupil ability and a number of different ways of working.

Pupils will be introduced to the existing curriculum subjects in the usual way, but will then be expected to produce in groups an audio-visual presentation. They will have to discuss the subject offered by the teacher; investigate a particular aspect of the subject which appeals to them; make group decisions as to the script; produce audio and video sequences in this script and finally record their prepared material by using television, film or tape-slide equipment. The pupils will make the final recording themselves.

Within this scheme of work there are many opportunities for children to speak and act together. In the recording part of the process speaking and acting become critical, with a particular need for fast and accurate speech, split-second decision-making and the translation of this into a verbal command. Because of this the children develop an understanding of interdependence and the importance of sensitive and reliable teamwork.

By working together in this way the children are able to discuss and modify their ideas, cope with the rejection of their ideas, learn to abide by a majority decision and be responsible to the group for their action. This kind of recording also allows them to analyse their work.

The schools in the project have the equipment for tape-slides and film work, though only some have television equipment on the premises, ranging from full studios to one camera in a converted classroom. We hope to demonstrate

how to work with little equipment. For those without television resources either mobile equipment, which is stored centrally at Durham Technical College, will be used or the pupils can be brought to the central studio at the college.

We will be looking at the different recording processes in making tape-slide film and television programmes and their relative merits in terms of oral communication and social skills. And the results of the two-year phase will be presented in a project report, including the results of an evaluation study, and a handbook describing the classroom strategies developed by the participating teachers. There will also be an evaluation of the benefits that this kind of audio-visual approach to learning might produce for the development of the pupils' oral and social skills, a general analysis of the advantages and disadvantages, and an examination of the support teachers and pupils would need. The handbook would contain a simple guide to this way of working.

There are a number of further implications to such work: two of the foremost being whether it is effective in terms of the curriculum subject itself, and the implications for the teaching of art, drama, music and creative writing when these are used as a medium for tape-slide, film and television in a curriculum subject such as history.

These concerns cannot all be covered within the first two years of the project. But these aspects of inquiry would hopefully form the basis for later research and development.

Carl Lora and Michael Weiss are project directors—"Communications and Social Skills 13-16 through pupil use of audio-visual media", Durham Technical College.

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Sunny solutions to a crisis

John Lewis and David Tawney on solar power

Could you exist in a world without immediate energy on tap? Even more pertinent, if you could, what about those who could not? It is being argued that our natural fuel—oil and gas—are too intrinsically valuable to be wasted by burning to produce energy, and energy should be obtained from other sources.

Examples of possible sources are geothermal heat, the power contained in the wind, tides and waves, and solar energy. (Nuclear power is discounted because of the long-term hazards associated with the radioactive waste produced.)

These alternative sources offer some exciting work for schools. Pupils could, for example, quite easily fit some simple propeller blades to a discarded bicycle hub dynamo and so build a wind-powered generator and make a fuel cell which combines hydrogen and oxygen over a catalyst to produce electricity—a sort of reverse electrolysis. (Griffin and George market a suitable kit for these interests.)

However, by far the biggest possibilities for school work are in solar power. Around noon on a clear day in midsummer the power falling on a square metre of surface perpendicular to the sun's rays approaches one kilowatt, the equivalent of that consumed by a one-horse electric fire. Even in winter when clouds prevent direct sunlight the radiation can still amount to a few hundred watts per square metre. To collect and use this energy without installing equipment too expensive to be justified by the saving in conventional fuels.

One solution is the flat plate solar collector, often called a solar panel, used to warm water. Work with solar panels in school science can vary from simple demonstrations of their feasibility with junior forms to sixth-form project work. Experiments can involve some of the basic ideas of physics—energy changes,

calorimetry, convection, conduction and radiation. There is also the bonus of an introduction to technological ideas in the design: clear specifications of the problems, installation cost, durability, maintenance, appearance and so on.

Solar panels can be used to convert the sun's energy into low grade heat which can be used to preheat domestic hot water or to extend the use of swimming pools. Currently there are some 30 firms in the United Kingdom eager to supply builders and the enthusiastic do-it-yourselfer with solar panels. Two laboratory suppliers, Irwin-Desman and Lennox Idens for Education, have developed models for school use.

The former is a flat plate solar collector using water as a medium and comes complete with lagged tank and circulating pump; the latter is based around a heat pipe. Both these models have been evaluated by the CLEAPSE (Consortium of Local Education Authorities for the Provision of Science Equipment) development group and their report is available to their members—any science teacher in an authority which subscribes to CLEAPSE. (If in doubt about membership contact their consortium.)

The development group looked for four particular features when making their evaluation. Is the panel authentic? Does it look and work like a real one? Does it effectively heat water in 35 minutes? Is it reasonably efficient so that the power absorbed by the water is at least 30 per cent of the incident power? And finally, has the panel variability allowing it to be used for investigations by pupils?

Solar panels are simple and many teachers may feel that these commercially produced models are too expensive and might wish to build their own. This is quite feasible and the National Centre for the

Development of Alternative Technology publishes plans based on a domestic radiator which could be used to heat the school swimming pool.

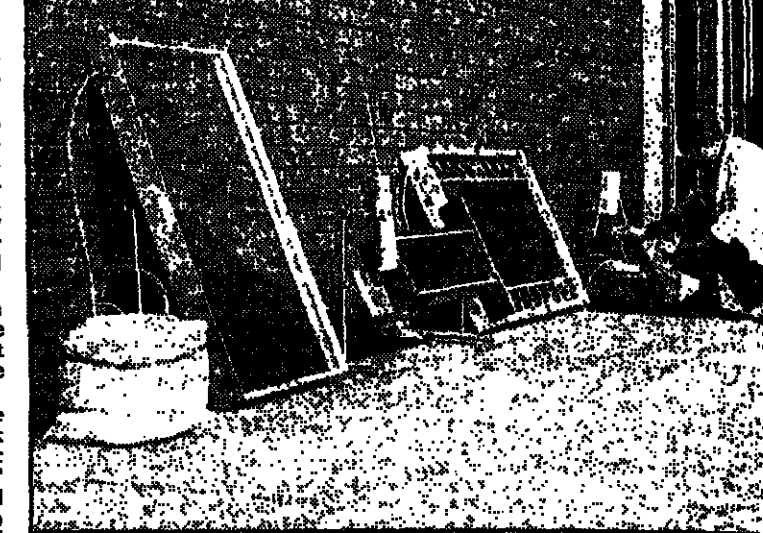
For demonstration work, however, a radiator is likely to be too heavy. Schools are advised to look at panels available to the building trades. A list of suitable firms can be got from the International Solar Energy Society, one of which, the Solar Centre, has developed a handy sized demonstration model.

Schools wanting to build their own panels from scratch must ensure that there is a good thermal contact between the collector plate and the ducts carrying the water.

A cheap solution is to run the water between a sheet of black polythene and a sheet of a plastic packing material called "air cap"—this is about an inch thick and cellular, a sort of plastic Aerobloc. CLEAPSE is developing a DIY design, using metal plates and ducts which with the addition of a large empty coffee tin and a 12-volt caravan water pump should offer maximum variability. Details will be available to members.

The biggest challenge, and the one which will determine the viability of solar power as an alternative source, is the conversion of the sun's energy directly into electrical power. This can be done now with photo-electric cells which in fact provide the power requirements for satellites. Unfortunately these are expensive and rather fragile, though the manufacturers are trying to overcome the drawbacks. To demonstrate the principle however, laboratory suppliers list solar cells which can be used with a small motor.

Another source could be a heat pump which works like a refrigerator in that it extracts heat from the ground and pumps it into the home.



Testing the solar panels at CLEAPSE

With improvements this could solve the problem of how to store unwanted energy in summer for use in winter.

In the short term better design of buildings may help us to conserve energy. One way of doing this is to recycle all the excess heat produced within a building and use it to heat the building where required. Another way would be to make people more conscious about energy consumption, the recent "Save It" campaign showed what could be done.

Whatever happens, we should be alerting our pupils to the consequences of living in a technological age and demonstrating to them that there are acceptable alternatives.

Useful addresses:
Lennox Idens for Education, 87a Trowbridge Road, Bradford on Avon, Wiltshire.
CLEAPSE Development Group, Brunel University, Uxbridge, Middlesex.
Royal Institution, 21 Albemarle Street, London W1.
Solar Centre, 176 Ifield Road, London SW10.
Griffin and George Ltd, 285 Ealing Road, Wembley, Middlesex.
The 375 Fawley Lecture, "A Second Look at Heat", by Lord Ashby, is available as a booklet from Esso Petroleum Ltd, Victoria Street, London SW1.
Two helpful books are: *Solar Energy for Man*, by B. J. Brinkworth (Compton Press) and *Solar Energy and Building*, by V. Szokolay (Architectural Press).

John Lewis is an ILEA Science Advisory Teacher. The views expressed are his own and not necessarily those of the ILEA. David Tawney is Director of CLEAPSE.

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Ideas, argument, experiences, research



Don't call us...

B. Harris

In my late twenties. During the past five years I have acquired a university degree, a second degree, and a postgraduate Certificate in Education.

In the past nine months I have applied for about 40 or 50 teaching jobs. I have received no reply from 15 to 20 of these; a dozen or so letters informing me that the post has been filled; several informing me that after looking at the candidates and/or the state of the current situation it has been decided that no appointment will be made at present; and, finally, five calls to interview.

It is, with the benefit of later experience, that I now, I had not realised for this one, I had not had my student-length hair cut, and agreed to differ with me about school uniforms and "change in education". I argued against contemporary "change for change sake". I tell you

these fences and finished a gallant second.

Technical college in southern England (Lecturer).

To arrive on time for this morning interview I had to travel to London, spend a night there, and get up at 6 am the following morning to catch another train. I was second favourite of three to a PhD, who eventually got the job. During the interview, I was directly asked about my political beliefs by the head of department present.

It was after this interview that I first identified the "sour grapes syndrome". My fellow unsuccessful candidate informed me that at least he was better off than I was. He, at least, had a job! I recalled being informed after the first interview that we had not been selected because of hair length. Possibly partly true, but the speaker's hair was shorter than that of the chosen applicant! The post-interview period is, however, a traumatic one, and perhaps people should be forgiven such emotional discharges.

School in North West London (Teacher).

On this occasion it was a rush job to make an appointment, because of the suddenness of the vacancy. Candidates were, there-

fore, interviewed as available, and consequently did not get to see each other.

I thought I had the job. True, by now the proverbial straw was well and truly grasped, but a few were nonetheless there to be so treated. The head told me that I should be warned of the result of the interview as soon as possible. After a few days I rang up, and was told that I did not have the job. I eventually received a letter informing me of the same some twelve days later. It had been posted second-class.

After the interview I had returned home on the train from London for the third time in three weeks, still jobless. I had developed a sudden dislike of travelling. Over the telephone I gathered at least some part of the identity of the new office holder. The similarity with the previous incumbent was striking. It made the whole thing look like a shabby, predetermined farce.

University in Southern England (Research assistant).

Pastures new! At this point one begins to feel that surely this time.

Still on this occasion there were no complaints, although I was asked my political beliefs, in-

directly. A couple of Masters were asked to "remain behind" I left with a PhD who exhibited just a little sour grapes.

No one got the job. For someone by now familiar with the nervous group of polite conversation awaiting the secretary's announcement of the victor, this was a surprise.

After the last interview all four of us were recalled to the head's study, and told that it was "only fair" that a fifth candidate, who had unfortunately applied rather late, should also be interviewed, and that we would only be informed of the result. The head then asked if any of us had other commitments. I said "no". He then said "I have to lose any of us". At this point, three of the candidates had no hope whatsoever of the job and the head's indifference appeared to amount to cowardice in the face of the candidates.

I believe all applicants should be kept fully informed of the state of their applications, despite the present postage charges. If a candidate is felt to be a firm favourite for the job perhaps he might be interviewed first, alone, and short of disaster, appointed. There seems little point in inviting along a supporting cast of "outsiders" just to fulfill some procedure and justify the favourite's "selection".

The losers' time might be more important to them than it obviously is to local authorities. (During the summer a temporary group of interviewers were costing me £8-10 a time). If more than one candidate is interviewed they might be treated with more real and less formal consideration.

While a national, centralized, computerized selection system might be too cumbersome, a system based on local education authorities could complete a full curriculum vitae, and the authority could then match these to vacancies. They could then follow the above format, but the candidate would be spared the full-time job of applying.

Finally, the Government might reconsider the cuts which have largely determined the present rules of the appointments game, thereby redressing the balance a little in favour of the candidates, and doing something to stem the gathering drift of disillusioned and qualified teachers away from education.

B. Harris is an unemployed teacher from South Wales.

The greatest growth area?

Peter Groves on the use of audio-cassettes in universities

When the Brynmor Jones report on audio-visual aids in higher scientific education was published in 1965, it is asserted that universities were beginning to think seriously about the applications of educational technology to teaching. In some respects the report had influenced university developments, notably in the establishment of major audio-visual units in some "high activity centres".

Although output may seem impressive from the viewpoint of many academic departments it is frequently disappointing. Teaching and learning methods often remain strictly

traditional, the only concession to educational technology being the occasional—and often ineffective—use of the slide projector. There are many reasons for this, two of which are particularly worth mentioning. First, the "professionalism" of the audio-visual unit can scare some teachers. They may be dissatisfied with their present teaching methods, but unwilling to try out television, where they will have to learn new communication skills and accept what seems to be a major commitment of time.

Second, the audio-visual unit is not normally part of the teaching

faculty. It may be physically remote and appear to have no real connection with the daily work of the academic department. The department does not have any power or financial involvement in the audio-visual centre, apart from having a member of its staff on the audio-visual committee.

The past few years, however, have seen the development of department-based units, known variously as learning aids laboratories or resource centres. These units normally have good working relationships with central audio-visual departments and act as an important link between the student and the professional. Nevertheless they are departmentally funded and staffed and they represent a significant departmental commitment to the development of new teaching and learning methods and to the applications of educational technology.

These departmental units are by no means the same, but they also provide students with a wide variety of learning materials. Many have shown a particular interest in audio-cassettes and a lot of material is now available in this form. Much of it is "in-house" material—prepared for use in the producing department, but some departments are making cassettes available for wider distribution. Cassettes are also being marketed in increasing numbers by commercial organizations and, in some cases, by professional societies.

One great advantage of the audio-cassette is that it does not require a great deal of equipment for its preparation or use. It is particularly appropriate to the modestly equipped departmental centre. Black cassettes are cheap and acceptable recordings can be made on a recorder costing approximately £35. Playback needs only a cassette player, costing perhaps £20-£25, and many students already have their own. A recording studio is not necessary; a quiet room with reasonable soundproofing will do. Although recordings made in this way may not be perfect, differences between these and more pro-

fessional productions need not be significant. Cassette recorders with editing and simple copying facilities, costing around £70, are now available and these can be used to eliminate the odd clicks, "ums" and "ers" and also to make copies for departmental use. If larger numbers are required for loan to students or for sale a high speed copier will probably be required. This will cost more than £800.

The variety of teaching material that can be presented on audio-cassette is large. Cassettes can be made to supplement lectures; to provide revision material; to give instruction in experimental techniques; to duplicate, or even replace, lecture courses presented conventionally. Speakers may be from other institutions or other countries, and students can be provided with authoritative personal accounts of topics by experts. Cassettes can be particularly helpful to students from overseas whose understanding of spoken English is inadequate.

The great advantage of the audio-cassette is that the user can work through it at his own pace. He can switch off whenever he wants to think, to write notes, to look up something, to work on a problem presented on the cassette.

Cassettes can be used at any time and as often as the user wishes. The conventional lecture, of course, has none of these features. Although, I am sure, few academics or students would wish to see lectures abolished, they are frequently inefficient, certainly for straight instruction.

No detailed educational research is necessary to come to this conclusion. Simple observation of students using cassettes in a learning aids laboratory will suggest they are working more effectively than in the average lecture.

There is nothing surprising about this: it results from the self-pacing nature of the cassette presentation. The student may spend perhaps an hour and a half working through a half-hour cassette, thereby covering as much ground as would be presented in a 50-minute lecture.

However at the end of that hour and a half he can have an adequate set of notes and a good understanding of the material.

In addition the cassette is available for repeated use whereas the lecture, however brilliant, has vanished. All that remains is what the student can remember and what he has written in his notebook.

It is normally necessary to accompany a cassette with other material, such as a printed booklet, in order to present both diagrams, tables, equations and other illustrative material. Much tape/slide material is now in use, although booklets have some significant advantages over slides. No equipment is required. They can be printed cheaply (as long as they are in colour). They can contain all the material that the tape/slide would presumably have to carry down from the slides. And the student can write in his own personal set of notes. He can also readily refer back to earlier material on review material yet to be presented.

If the student works in a study booth, with sound from the cassette, player supplied over headphones, he is effectively distracted. Visual and aural aids simultaneously, and if the spoken material and the printed material are carefully prepared and properly related, can powerfully reinforce each other.

However, whatever their merits, one would not wish to see students spending most of their days listening to the cassette. There must be said for adopting a variety of techniques, relating them closely to the needs of the subject, and the requirements of the student. Nevertheless, the experience that has already been gained suggests that the cassette is a promising growth area in the field of educational technology.

Peter Groves lectures at the University of Aston.

View of the course

J. W. Starr

There has been a rapid growth in the use of audio-cassettes to replace traditional one-off-course examinations. This has been, at least in part, due to an increasing awareness of the unreliability of any one measure of attainment. It has sometimes claimed that the cassette style adopted by students is a method of cheating, but it is possible that students' perceptions of how a particular aspect of assessment functions are important as its actual mode of operation.

In the department of education at the University, where a final examination is retained, but 40 per cent of the total marks are based on course work, a survey of opinion among graduates taking a one-year teacher training favoured the cassette method of assessment, although a majority would have preferred a higher proportion of marks allocated to course work.

There seemed to be a belief that some students are more adept at operating the exam system, while others find it easier to demonstrate their abilities in course work. A mixed system is, therefore, likely to be fairer to all—the "natural worker" and the "question spotter".

The main objection to formal exams was with exams in practice rather than with the principle. While examiners see the formal paper as providing an opportunity to show originality and flair in selection and presentation of material, students regard the main prerequisite for success as an accurate and copious memory.

Students were asked for their views on the relevance and usefulness of different elements of course work, and on whether or not each element should contribute to the final mark. Included in the course work were two major class exams, one on general educational topics, the other on educational psychology.

There were also three essays: a short introductory one, a personal evaluation of the student's educational experiences, a conventional long essay on a theoretical topic, and a prepared essay, written under exam conditions, for which the titles were announced ten weeks before. Students were also required to keep a teaching practice diary to assess their work on topics related to the teaching of their main subject, and to carry out projects in two courses chosen from fourteen.

In the students' responses there appeared to be three distinct levels of "approval". Special method work related to the student's main teaching subject, and a long essay on a theoretical topic, were each valued at about 90 per cent of the group. In a professional course it is not surprising that work which relates directly to the classroom is regarded as important. The fact that an essay demanding fairly extensive reading on a theoretical topic is also valued by such a high proportion of students is, perhaps, an indication that their interests are not quite so narrow as is sometimes suggested.

The group of assignments at the second level of approval, rated as useful by about 75 per cent of students, contained class exams, the

teaching practice diary, and projects in two courses. The practical nature of the diary and the element of personal choice in the courses probably ensured reasonably favourable attitudes.

The third, and apparently least successful group, rated as useful by about 45 per cent of students, consisted of two essays. The first, written at the beginning of the course, was concerned with the students' own educational experiences. Some students regarded this as a trivial exercise, others thought it would be more valuable placed later in the course, when they would be in a better position to assess their experiences against their knowledge of educational theory and practice.

The second essay was written as a two-hour examination 10 weeks after the topics were announced. It is not clear why this particular piece of work was unpopular. It was, possibly, the first time many of the students had written an essay of this kind. A few, who wrote their essays in advance and tried to memorize them, were understandably confused by the task.

On the contribution of course work elements to the final mark, the only significant divergence from views on relevance occurred for the biographical essay. Only 23 per cent of students thought marks for this should count towards the final assessment—about half of those who regarded writing the essays as a useful exercise.

A point of concern to students was the comparability of standards of marking among tutors. When relatively small groups are involved

in my first year group of 11-year-olds. One day, Mary wrote an account of her brother which I duplicated and took to the fourth year set to use as a comprehension exercise.

Interest in Mary's work—not just as John's articulate sister, but as a talented writer as well—was unexpectedly keen. Members of the class began to volunteer their own work for the first years to read, to show how and about what 14-year-olds wrote.

Then the obvious presented itself: to pair each fourth year with a first year (a convenient 30 in each set). There was universal interest.

The fourth years started with formal letters of introduction, each to his or her own pen-pal, providing a little personal information and an offer to supply a story on the pen-pal's chosen theme.

First-year response was lively, challenging and precise: "Write about Crystal Palace winning." "A story about Frank Spencer, please." "I'd like to disagree, thank you!"

Fourteen fourth-years replied; some as requested, some deliberately provocative, but all willingly done and not considered "work". The stories were received with enthusiasm. Each other's and wrote back pages of praise, complaint, criticism,

witicism—and demands for spelling mistakes to be written out three times each.

Then we reversed the procedure. The first-years wrote stories according to fourth-year specifications and received their commentaries in return. From both classes was coming the request to meet each other. This seemed best done in an interview, each to interview and be interviewed by their respective pen-pal. Again, the prospect generated enthusiasm.

A windy Tuesday morning saw 30 fourth-years walking the mile to the other side of our school. Thirty first-years waited eagerly to set eyes on the owners of now-familiar

names. The mutual friendliness, plus the whole-hearted participation of everyone involved, rewarded itself. Afterwards, each wrote up the experience of the interview (factual information about the interview, views on school, opinion of the other's work) and swapped it with the pen-pal. By common agreement, each kept the other's written work.

Already, there are requests coming from both age-groups to repeat the exchange next term, to "see how we've changed" and—perhaps most valuable of all—"see what we've learned."

Jane M. Read is a probationary teacher of English at Southgate School, Enfield.

statistical standardization of marks is as likely to cause unfairness as to rectify it. If different elements of course work are marked by different tutors any inequities would, on average, be expected to balance out; but for an individual student there could still be a fortuitous coincidence of low or high marks.

Independent assessment of work by two or more tutors, with the final mark being the average of the separate marks, is a well-known procedure which can ameliorate this problem; but course work in the course, when they would be in a better position to assess their experiences against their knowledge of educational theory and practice.

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Only here for the reading?

Mary Hoffman looks at
what people expect from and what they get
out of reading conferences

I was invited to speak on this subject, I think, because of my experience as an educational journalist attending reading conferences. There have been I.A.U. conferences, dyslexia, adult literacy, children's literature in education conferences, conferences about what Bullock was going to say and about what Bullock did say, conferences about what we were going to do about it and about why we had not doing anything about it and, of course, UKRA conferences.

Why do people attend reading conferences? What do they expect them to be like? How far do the realities match up to their expectations? I am there for a reason very different from that of most delegates—to get a story. My needs are all in the short term. As a reporter I need copy to phone to my paper within hours of hearing it. I need educational ideas that are interesting, exciting, even shocking.

The dull, however worthy, will not be read by my readers. If I put it in, the sub-editors will take it out. The intricate, thoughtful ideas on matters of narrow specialism may, and should, be well considered and put into practice by delegates. To me they are a luxury.

What do I expect, and does the reality live up to my expectations? It is easy to be cynical about conferences when you go in a lot of them and hear the same people saying the same things. Last year Dudley Wake, chief education officer for Manchester, began the UKRA conference with a list of things that speakers do wrong. They do not speak about what they are supposed to, do not prepare what they have to say well enough, and they have terrible delivery and style.

"I regard it as unforgivable," he said, "for a speaker to tell an audience of teachers released from schools to attend that he will take 40 minutes and, in fact, go on for 50. I take no comfort at all when nationally known speakers at in-service courses manifestly have done no preparation, and seek to use old material that is only of marginal relevance to the subject allocated to them."

As a reporter, I, like everyone else, have only the conference programme to go on. "Sessions in reading primers," says the title—and someone reads a summary of the research he did two years ago into the difference in reading achievement between boys and girls.

We should be less tolerant of speakers who do not talk on their advertised topics. Any one who proposes to take such an unprofessional step should be treated as a maverick under the Trades Description Act and asked to allow time for those who wish to move to another session or go for a walk round the city.

A speaker begins: "I am going to be controversial today." I put down my pen. Someone asks me not to report a paper and I know it is one that would not have given me any copy. I attend a lecture by a speaker renowned for spontaneity and sparkle; he stands head down reading coming for comments from a written paper. I go to hear a specialist whose books have always impressed me and hear not a word. The specialist has not mastered the microphone.

Speakers often start by saying: "I didn't realize I was supposed to be speaking about this until Jack told me five minutes ago," or "I was going to give you a long intellectual presentation of this subject but, instead, I think I'll just offer you a few ideas to set the ball rolling," or "I did write a paper on this subject, but I decided to tear it up and talk to you as one reading teacher to another." All these gambits I find insulting.

There are always speakers and sessions that exceed the wildest expectations. Ruth Love Holloway, star of two UKRA conferences, is a gift to reporters and, come to think of it, to everyone else. Peter Dickinson, the children's writer who spoke last year at UKRA, achieved the rare distinction of being funny and intelligent at the same time. Everyone has his own list of people who are always good value, who do not let you down.

The realities of a reading conference for me, then, are: finding a story, finding a



phone and trying not to lose too many friends. The expectations of the classroom teacher can be satisfied over a longer term. Indeed, they must go beyond the week, or whatever it is, of the conference.

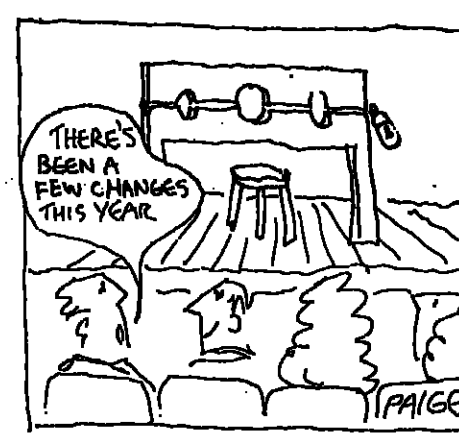
I have heard it said that what teachers want are tips for the classroom. If this is true, why not? One head said she wanted to know what reading schemes to stock in her school, but no reading expert would ever tell her. Some might say she was asking the wrong question, but she still wanted an answer.

I suspect that for many teachers of reading the lecture is the least important part of a conference. Seminars and workshops are quite good, but discussions over coffee cups or beer mugs are best of all. It is a pity more reading experts do not get into coffee cups and beer mug situations with reading teachers. They would discover that today's teachers are less unquestioning and adulatory than they sometimes assume.

Of course, "what to do at nine o'clock on Monday morning" is not the most important consideration in the teaching of reading, but some speakers are too ready to dismiss it as being no kind of consideration at all.

At one workshop I thought the speaker—an eminent one—was not saying anything new, perceptive or valuable, but merely wrapping up some very ordinary ideas in a lot of modern-sounding jargon. But I was told by teachers on the way out—kindly but not without pity—that it had been immensely useful—for teachers. In humility I reported it.

There are 17 publishers or representatives of television at UKRA this year, and many more publishers' representatives. I have asked some of them why they have come. Talent-spotting is a large part of an educational publisher's conference job. Lectures



may not give this information since many people who write well lecture badly. But there are always the sessions in the bar, where a publisher may be able to see that he has found just the right author for a potential book or series. One publisher told me he collected 40 per cent of his list from reading conferences.

Publishers also want to know what the fashionable topics in the reading area are going to be, and they look to people at conferences to give them a lead. Will phonics be in or out? Is the boom in books for adult illiterates going to continue? Will any of the titles they are planning to bring out in the coming year be dead ducks? That is another responsibility for speakers. Fashions in haute couture may change with the seasons, but should we have arbiters of elegance in the reading world?

Publishers' representatives have a different role. Generally they do not attend sessions. If I say that most of their work has to be done in the bar, I hope no-one will misunderstand. One year the chairman of a plenary session had to announce that the representatives were disappointed with the attendance at their book exhibition.

You can see their point of view; they had laboured hard to put up an exhibition and no one was looking at the books. But you can see the delegates' point of view too; they had such a heavy programme that there was scarcely time to get a cup of tea, let alone see round an extensive exhibition.

For anyone connected with the organization of a conference, the realities are different again. There are people who turn up asking indignantly why they have not been allocated a room; people who want to change rooms because they cannot sleep facing south, or must be on the top floor or next to the fire escape; speakers who don't turn up, or have left their luggage with all their notes and equipment at Crews; conversers who haven't convened; chairpeople who don't chair; caterers who can't cater; the realities must seem more like a nightmare.

Have you ever considered whether the speaker you hear is the first, second or nth choice made by the organization? Making a

conference is not like making a pudding, where you follow a list of ingredients and take what you need off a shelf. The more specialized the topic, the more difficult it is to get the right speakers in the first place, or to replace them when they drop out. Not that a second choice is necessarily second best. How many people could have guessed that the brilliant Peter Dickinson was doing a last minute stand-in at UKRA last year.

There is another serious question to ask about the organization of UKRA and its expectations of a conference. Officials, speakers and conveners not only receive no payment, but pay their own full conference fees and travel expenses. Many busy people are squeezing UKRA conference duties into their few spare hours throughout the year. Is this right, and would there be a higher standard of performance if the policy were different?

Stars of the reading circuit, who may earn a lot of money for giving public lectures, speak here for love, but perhaps the romance has worn thin. Some of them may not embrace the occasion quite as full-bloodedly as they did when they and UKRA first got to know each other.

The absence of payment means that the organizers have no leverage with their speakers. They cannot insist on receiving a paper or an abstract before the conference. They are asking a favour of their speakers to give one at all. One speaker did not hand in a paper then or later. When the harassed president, with an eye on the publishing deadline for the proceedings, went to the trouble and expense of having the speech transcribed from a tape, he was told: "Oh no, you can't print that rubbish!" The organizers cannot protect you from speakers who won't talk on their theme, or from people who are prepared to speak, but not to print, rubbish.

There are other delegates whose expectations I have not dealt with—advisers, consultants and authors among them. But expectations and realities are not just a matter of the profession you represent when you attend a conference. I would be the last to want to create a teacher stereotype, for example. In all categories, there will be some for whom the reality is that they were trying to get away from the children or that they had toothache all week. There will be some who are there for the beer, others for the skittles.

This week I have been asking people why they go to reading conferences: only one said anything about reading. But the conference itself is only a vessel, a container. It may be the kind that you want to discard immediately like a plastic carton, anonymous and unmemorable. Or it may be a handsome produced souvenir to keep on your mental mantelshelf for many years.

This is a shortened version of a paper given at the thirteenth annual United Kingdom Reading Association conference in Durham last month.



Sponsored by
THE TIMES

2 nights

Educational Supplement
Monday 29 and Tuesday 30 November 1976

Commences 7.30 p.m. (Doors open 7 p.m.)

ROYAL ALBERT HALL

General Manager: Anthony J. Charlton

Now a second great year...

Announcing the second year of the overwhelmingly popular Schools Prom Concerts. Perhaps the most accomplished and entertaining programme of young people's music today featuring the most outstanding young musicians from The National Festival of Music for Youth. The Schools Prom has now been developed into a two-night event with concerts on 29 and 30 November at the Royal Albert Hall, sponsored by The Times Educational Supplement.

Special Prices/Discounts...

As happens with the Sir Henry Wood Promenade Concerts the arena seats will be removed for the concert. Both this area and the Gallery are offered at the following special low prices:
Promenade Arena 40p (80p on night) (standing not available for children under 12)
Gallery 40p (80p on night)

There will also be a party discount of one free seat per 12 booked seats. Schools/party travel arrangements can be made through B.U.S. School Travel Service, 180 Camden Hill, Notting Hill Gate, Kensington, London W8. Tel: 01-221 6287 contact Jill Daniels. Or your local National Travel (NBC) Ltd representative.

Booking Your Choice of Nights...

You now have a choice of two nights, 29 and 30 November. Different music groups are playing each evening and promise to be equally exciting and entertaining, offering an exuberant evening's music by the leading musicians of tomorrow. The variety and range of musical content will be the same for both evenings, though not the same works.

In view of the considerable interest already shown in this unique musical event, advance booking is advisable and should be made as soon as possible, by completing the order form.

Orchestral, ensemble, swing, jazz, wind...

In fact, all kinds of musical style will be featured... by all kinds of the most promising young musicians our schools can offer. Introducing this score of musical talent will be well-known personalities from the world of contemporary music—including Anthony Hopkins, Robin Ray, Humphrey Lyttelton and Derek Jewell.

Please enclose stamped-addressed envelope to:
Schools Prom, Advance Bookings, Royal Albert Hall,
Kensington Gore, London SW7 2AP.
Please send me tickets for the Schools Prom as follows:

Sponsored by
THE TIMES
Educational Supplement

Date required:	No. of tickets:	Total cost:
☐ Gallery tickets at 40p each		
☐ Arena tickets at 40p each		
☐ Stalls and Grand Tier at £2.00 each		
☐ Loggia and 2nd Tier at £1.75 each		
☐ Balcony (central) at £1.00 each		
☐ Balcony (side) at 75p each		
☐ Middle and Upper Orchestra at £1.00 each		

Enclose cheque/P.O. to the value of £..... plus stamped-addressed envelope (Please make cheques payable to Royal Albert Hall)

Name: Mr/Ms/Miss _____
Representing: _____
Address: _____

Receipt of your booking and cheque/postal order cannot be acknowledged. Orders will be recorded and tickets issued from mid-September. In the unlikely event of your not receiving your ticket by mid-October, please contact The Royal Albert Hall Box Office.

OFFICIAL USE ONLY

The British Council

Invites applications for the following posts:

Village Technology Expert (Cameroon)

Insitut Pedagogique Applique a Vocation Rurale, linea To continue with a survey and analysis of village crafts, materials and personnel and to develop appropriate technology curriculum for use in primary schools and teacher training/in-service courses.

Degree or teaching qualification and substantial relevant overseas experience.

Good knowledge of French very desirable.

Salary: £4,389-£5,409 p.a.

Benefits: overseas and children's allowances; free accommodation. Two-year contract. 76 HO 135

ELT Adviser (Niger)

Ministry of National Education, Niamey

Advancing through the Institut National de Developpement, recherches et animation pedagogique en developpement de l'ETI in Niger. A limited amount of university lecturing.

Relevant degree and fluent French essential. Postgraduate TEFL qualification, experience of advising on ELT and of Francophone Africa desirable.

Salary: £4,389 to £5,409 p.a.

Benefits: overseas and children's allowances; free accommodation. Two-year contract in the first instance. 76 HU 20

Primary ELT Posts (Cameroon)

Insitut Pedagogique Applique a Vocation Rurale, linea Primary ELT Course and Textbook Production Expert To prepare and evaluate an English Language course for primary schools and to prepare materials.

Degree, postgraduate TEFL qualification and experience of TEFL/ESL at primary level.

Primary ELT Teacher Training and Curriculum Development Expert

To train teacher trainers, to organise and supervise teacher training and in-service courses.

Degree, PGCE preferably in TEFL/ESL and experience of teacher training and curriculum development at primary level.

Overseas experience and a good knowledge of French very desirable for both posts.

Salary: £4,389 to £5,409 p.a.

Benefits: overseas and children's allowances; free accommodation. Two-year contracts. 76 HO 134-135

Curriculum Developer in ELT (Cyprus)

The Turkish Teachers' Training College, Nicosia Degree in English, PGCE and relevant experience including TEFL/ESL. A TEFL qualification is desirable.

Salary: £4,389 to £5,409 p.a.

Benefits: overseas and children's allowances; free furnished accommodation; medical schemes; employer's portion of superannuation. Contract for two years initially. 76 ST 3

Course Tutor and Materials Designer (Saudi Arabia)

King Fahd University, Dammam

(Communication Skills in English, Project) To teach English Language and to prepare course materials for students in the Faculties of Medicine, Agriculture and Architecture.

Candidates, men only, single or unaccompanied (because of accommodation restrictions), must have appropriate qualifications and experience and an interest in ESP.

Salary: £4,797 to £5,817 p.a.; no local taxation.

Benefits: free furnished accommodation; overseas allowance; special project allowance. One-year contract, probably renewable. 76 AU 110

School Teachers (Turkey)

Darussafaka Lisesi, Istanbul

Independent English-medium secondary boarding school for approximately 620 pupils in the age range 11-19 (girls included in junior classes).

a. Teachers of English for 11-16 year olds

b. General Science Teacher for 13-16 year olds.

For post a, trained teachers with a degree of teaching certificate in English or with English as the main subject and relevant teaching experience.

For post b, trained teachers with a degree or teaching certificate in one or more Science subjects and relevant teaching experience.

For all posts men are preferred.

Salary: non-graduates—£2,160-£3,636 p.a. net, approx. graduates—£2,340-£3,636 p.a. net, approx.

Salary increase anticipated before start of academic year.

Benefits: free accommodation in school or rental allowance; medical scheme. Two-year contract, renewable. 76 SS 121-125

Lecturer/Adviser in Francophone English ACE Scheme (Ghana)

Language Centre, University of Ghana, Legon Devising courses in EFL and Applied Linguistics for and lecturing to students from Francophone Africa.

Relevant degree, diploma/M.A. in EFL/Applied Linguistics, 7-8 years' appropriate experience, knowledge of French, essential.

PGCE, experience in ESP and audio-visual aids desirable.

Appointment to the British Council on contract for 2 years. Possibly renewable.

Salary: £5,578 to £6,678 p.a.

Benefits: overseas and children's allowances; free accommodation; medical scheme. 76 TU 116

Lecturers in TEFL (Iran)

British Council Teaching Centre, Meshed

For teacher training, supervision, course design, ESP materials preparation and administrative duties.

Degree or teaching certificate; postgraduate TEFL/ESL qualification; 8 years' relevant experience, including 2 years' specialised TEFL experience of ESP/teacher training/administration. Single or married candidates eligible.

Salary: £5,001 to £5,817 p.a. tax free.

Benefits: accommodation allowances £2,200 p.a. (single); £2,580 p.a. (married + 1 child); £3,160 p.a. (married + 2 children); family fares; children's education allowances; employer's portion of U.K. superannuation; medical scheme. Two-year contract, renewable. 76 ITO 88-89

Lecturer in English/ELT Adviser (Chad)

University of Chad, NDjamena

To train teachers, provide some ESP, advice on ELT at the Institut National des Sciences de l'Education. Degree in English or Modern Languages, postgraduate TEFL qualification, several years' relevant overseas experience, good knowledge of French.

Salary: £4,389 to £5,409 p.a.

Benefits: overseas and children's allowances; free accommodation. Two-year contract. 76 HU 107

English Teacher (Turkey)

The English High School for Boys, Istanbul.

Independent day school for approximately 360 pupils, mainly Turkish, in the age range 11-20.

Trained teachers with degree or teaching certificate in English or with English as the main subject. Men preferred.

Salary: Approx. £2,381 to £4,363 p.a. net; approx. one third of salary paid in sterling in Britain.

Benefits: employer's portion of superannuation; furniture grant; terminal bonus. Two-year contract, renewable. 76 SS 90

Head of Digestive Physiology Division (Brazil)

Federal University of Pernambuco, Recife

To establish a Division of Digestive Physiology and to supervise research programmes.

Doctorate and substantial practical experience.

Salary: £10,000 p.a. approx.

Two-year contract, renewable. 74 BU 81

Drama Advisers (Malta)

The Manoel Theatre Drama School, Valletta Newly-established drama school attached to the Manoel Theatre.

a. Director

b. Assistant Director

Candidates, men or women, should be suitably qualified graduates, preferably in the age range 35-55.

Salary: in excess of current U.K. entitlements.

Benefits: tax-free allowance; free accommodation; children's educational allowances. Two-year contract with the Ministry of Overseas Development.

Closing date for application: Friday, 27th August. 76 SO 129, 130

English Specialists—EFL Scheme (Thailand)

Chulalongkorn University, Bangkok

Specialist in Instructional Materials in ELT

b. Specialist in Curriculum Evaluation and Testing

Graduates with relevant postgraduate qualification and experience (at least 3 years).

Appointment to the British Council on contract.

Salary: £5,678 to £6,678 p.a.

Benefits: overseas and children's allowances; free accommodation; medical scheme. Two-year contract, renewable. 76 TU 104/5

Administration

Local Education Authority

BIRMINGHAM

THE UNIVERSITY

COMPUTER CENTRE

Applications are invited from

qualified and experienced

persons for the post of

Graduate in the User Services

Group of the Computer Centre.

The main duties will be to

provide a high standard of

service to the users of the

Centre's facilities and to

advise on applications in a specialist

area, including one of the follow-

ing: data base design and manage-

ment, language compilers, data pro-

cessing.

Salary range £2,470 to £3,020

(plus £2,110 with superannua-

tion). The Centre provides a wide

range of computing facilities, both

local and networked, and coun-

selling services to the user.

Applicants should obtain an

outline of the available facilities

from the Assistant Head of

Computing, Mr. J. H. Jones, from

the University of Birmingham, P.O. Box 363, Edgbaston,

Birmingham B15 2TT. Closing date

27th August 1976. Enquiries to Mr. J. H. Jones.

ESSEX

ESSEX FOREST DISTRICT

Applications are invited from

qualified and experienced

persons for the post of

Assistant Manager of the

Forest District, Essex Forest

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The main duties will be to

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